USER GUIDE

QmodemPro

FOR WINDOWS

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QmodemPro

User's Guide

Windows Release

(12/1/94 printing)

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Colophon

This manual was written, edited and composed in Microsoft Word for Windows version 6. Final 600 dpi camera-ready pages were printed on a Hewlett Packard Laserjet 4. The body text is set in 10 point Futura Light, with headings in Contemporary Brush.

The Futura family of typefaces was designed in 1929 by Paul Renner. Its geometric forms are characteristic of the Art Deco style of the 1920s. Its readability and pleasant proportions have earned this classic modern typeface an enduring popularity.

Contemporary Brush is a hand-lettered font designed for the pioneering 1950s phototypesetting library Filmotype, possibly by Tommy Thompson. This TrueType version of the 1950s original has an easy-going but dignified style, providing an attractive yet unobtrusive emphasis to headings.

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1 - Installation

Make it so . . .

Jean-Luc Picard

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What is *QmodemPro for Windows*?

QmodemPro for Windows is a full-featured professional communication software program designed to take advantage of the graphical user interface and multitasking capabilities of Microsoft Windows.

Like other communication software programs, *QmodemPro for Windows* offers the standard features you need: a full slate of file transfer protocols (including the industry standard Zmodem), more than 30 terminal emulations, macros and programmable keys, and much more. Over 100 of the most popular modems are supported automatically, along with Interrupt 14 devices and Local Area Network modem sharing devices through upgraded communication drivers for Windows.

While the program is simple enough for a beginner to use, it is flexible enough to meet the needs of the most sophisticated modem user. You can send and receive Faxes (if you have a CLASS1 or CLASS2 Fax modem). You can set up a mini-BBS (Bulletin Board System) using the *QmodemPro Host* script. Or you can write programs of your own which interact with *QmodemPro for Windows*, using its built-in scripting language.

About the manual

The manual for *QmodemPro for Windows* is in two volumes. The first volume, this one, is a guide to the day-to-day operation of *QmodemPro for Windows*. The second volume is a reference manual, consisting of an in-depth discussion of the *QmodemPro for Windows* script language, SLIQ. The second volume, like the first, is fully indexed.

This manual describes *QmodemPro for Windows* operation and features at the time of publication, and does not reflect changes made to the program after the manual was completed. Be sure to check the special Help file that pops up during the program installation. This file contains important information about last-minute changes in the program, additional features, and errors or omissions in the manual. You can also view this special help file any time while you're viewing the on-line help in *Qmo-*

demPro for Windows — select **Help/Contents**, then click on the **Last Minute Changes** topic.

Typographic conventions

The following type styles are used throughout this manual to represent keys you press and information you type:

ENTER	This represents a key you should press
ALT Z	This is a combination key. Hold down the ALT key, then press the indicated key.
QMWIN	This indicates a command for you to type exactly as shown.
WHEN "Name"	This is an example of a script language command.

Note the difference in appearance between a Zero "0" and the uppercase Oh "O".

Click	This means a single click of the left mouse button.
Double Click	This means two rapid clicks of the left mouse button.
Drag	Move the mouse pointer over the item you wish to select, then click and hold the left mouse button while you move the mouse to the location desired.

System Requirements

Before you begin the installation, please confirm that your system meets the following minimum requirements:

- An IBM personal computer or 100 percent compatible with Intel or compatible 80386, i486 or higher CPU and 4 megabytes or more of memory, capable of running Microsoft Windows 3.1 or higher in standard mode or 386 enhanced mode. 8086, 8088 and 80286 (or compatible) processors are not supported.
- Microsoft Windows 3.1 or higher, installed on your PC.
- A VGA graphics adapter and monitor are required. Lower graphic resolution modes (EGA, CGA, Hercules) are not supported.
- Approximately five megabytes of hard drive space is required by *QmodemPro for Windows*, with additional space for temporary and support files.
- A mouse or other pointing device supported by Windows. While *QmodemPro for Windows* can be operated entirely from the keyboard, a mouse provides faster and easier access to many commands.
- An asynchronous modem, internal or external. Baud rates from 110 to 230,400 are supported. An external modem requires a serial port and cable, while an internal modem requires an expansion slot inside your PC.
- A voice grade telephone line.

Skills you need

We assume you already have some familiarity with the Windows interface, and that you are comfortable using the mouse to select commands and options from icons, menus and dialog boxes. We also assume a basic knowledge and understanding of DOS commands for copying files and navigating subdirectories. If you need help, refer to your Windows User's Guide and your DOS manual, or ask a knowledgeable friend or co-worker.

Installing *QmodemPro for Windows*

The *QmodemPro for Windows* installation procedure is similar to that used by most other applications for Windows.

The first step is to confirm that your modem is installed correctly, and is powered on. Refer to your modem manual if you are not sure how to install your modem.

Next, put the *QmodemPro for Windows* Installation Disk in a floppy drive. Select the **File/Run** command from the **Program Manager**.

Type:

```
A:SETUP.EXE
```

in the **Command Line** dialog box. Substitute the letter for your own floppy drive, if necessary, and click the **OK** button.

The *QmodemPro for Windows* installation program will then begin copying the files from the distribution diskettes to your hard drive. You cannot install the program simply by copying the files from the floppy disk to the hard drive since they are in a compressed format.

As the installation progresses, you may be prompted to change diskettes so that additional files can be installed. The name of each diskette is printed on the label.

One of the first dialog boxes you will see is for **Directory Setup**. The default paths for your home directory, scripts, Fax files, host files, RIP icon files, upload and download directories and others are shown in the box. For most users, we recommend leaving these settings unchanged.

Part of the Directory Setup dialog box asks you to select **Install Options**. For most users, all the options in the list should be selected. The amount of disk space required, and the space available, are shown at the bottom of the dialog box.

Press your F1 key (function 1) at any time during the installation to view a help screen.

When you are satisfied with the information in the Directory Setup dialog box, click **OK** to continue with the installation. Another dialog box will

pop up, containing a list of modems, allows you to select and configure your modem. Find the brand and model name or number of your modem on the list, or, if your modem is not on the list, select one of the Generic modems whose baud rate and features most closely match your own. Your modem will be configured automatically for you with the correct settings for *QmodemPro for Windows*.

Click the **OK** button when you are satisfied with your choice. The installation program will then search for modem ports on your PC. This may take a few moments, so please be patient.

A dialog box will pop up with a list of communication ports found by the installation program. Select the port to which your modem is connected, then press **OK** to continue. Another dialog box will appear, showing the commands *QmodemPro for Windows* will use to program your modem for most efficient operation.

The final dialog box asks you to enter your name, company or organization, and product registration number. The registration number is stamped on the registration card, bound inside the cover of this manual. Don't forget to fill in and mail the registration card as soon as possible, so you can receive product information, technical support, and notices of upgrades and new products.

The installation program will create a new **Program Group** on your Windows desktop, containing icons for the *QmodemPro for Windows* program and its support files.

At the end of the installation, a Windows Help file will pop up, with important information on any changes to the program and documentation, and additional information which may not have been available when these manuals went to press. Please review this information carefully, and make note of the printing, annotation and copying capabilities of the Windows help system. This help screen is always available through the regular *QmodemPro for Windows* on-line help system, under the **Last Minute Changes** topic (**Help/Contents/Last Minute Changes**), and as an icon in the *QmodemPro for Windows* Program Group.

You are now ready to begin using *QmodemPro for Windows*.

Upgrading from previous *Qmodem* versions

Qmodem Test Drive, *Qmodem* and *QmodemPro* for DOS

If you have used the DOS version of *QmodemPro, Qmodem v5, Qmodem Test-Drive* or the older shareware version of *Qmodem,* you will find *QmodemPro for Windows* is significantly different.

Phonebook Conversion

To convert the phonebook or dialing directory from the DOS versions of *Qmodem, QmodemPro* and *Qmodem Test Drive,* first copy the old phonebook from your *Qmodem* directory to the new *QmodemPro for Windows* directory. Then start *QmodemPro for Windows* and open the dialer with the **Phonebook/Directory** menu command. Use the Phonebook menu command **File/Open** and select the name of the old phonebook.

QmodemPro for Windows will indicate that the format is incorrect and ask if you want to convert it to the new .PHN phonebook format. Answer **Yes** to create a new phonebook using the same name with the extension .PHN. If using the same name would overwrite an existing file, you will be prompted to select a unique name.

A note regarding script conversions

Due to major changes in structures, script files cannot be converted to the new *Script Language Interface for Qmodem* (SLIQ) format.

Other communication programs

If you previously used another communications program, you may be able to convert the phonebook or dialing directory files to the *QmodemPro for Windows* format.

We have included a program named PHNCVT.EXE that converts **Procomm Plus DOS v1.1, Procomm Plus DOS v2.0, Telix DOS v3.x}} and Boyan v5.x** phonebook files. This conversion program is installed in

your *QmodemPro for Windows* program group. Note that no conversion is available for **Procomm Plus for Windows** at this time.

Start the program by double-clicking the **Convert Phonebook** icon. Select the type of file to be converted and the names of both the original and new phonebook files.

2 - Getting Started

Remember this, that very little is needed to make a happy life.

Marcus Aurelius Antonius

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If you've never used a modem before...

. . . you're probably wondering just how much technical knowledge you'll need to absorb before you can make your first connection with a Bulletin Board System or Online Service.

It's easiest to grasp if you think of your PC and modem as just another kind of telephone. A modem allows your computer to "talk" to another computer over the phone line, in more or less the same way you would talk to a friend.

In the paragraphs that follow, we will explain a little of how communications hardware and software works, and how you can use it to connect your PC to other computers, Bulletin Board Systems, and Online Services. A hands-on tutorial is next, during which you'll actually call a Bulletin Board System, send an E-mail message, and download a file. We finish up with some hints on where to find more information on modems and communications.

Data Communication

First, a simple explanation of how data communication works.

There is already a lot of communication going on within your PC. Every time you type a character on the keyboard, those keystrokes are communicated to the CPU (Central Processing Unit), which stores them in RAM (Random Access Memory).

Those keystrokes form commands, which are translated by the program running on your PC (the Application), into instructions which are meaningful to the computer. There are other ways to send commands to your computer as well — by moving the mouse and clicking on a menu selection, for instance.

When your computer acts on a command, it communicates that command to a device. A device might be a printer (to print a letter you've typed using a Word Processor), a disk drive (to save a document as a file), or a monitor (to draw a picture or play a game).

Each device or port on your computer has a name and address. Your keyboard and monitor are a device called CON (for CONsole), your printer is a device called PRN (for PRiNter), your floppy drives are devices named A: and B:, and your hard drive is a device named C:. You may have additional hard drives, CD-ROM drives, network drives and RAM-drives with drive letters of their own from D all the way to Z, depending on how many drives are available.

Some devices in your PC have alternate names, especially in cases where your computer has more than one port available for a particular device. If you have a second printer port, for example, it would be called LPT2 (for Line Printer 2), and your PRN port is also sometimes called LPT1 — these two names for the first printer port on your computer are interchangeable. The printer port is often called a Parallel port.

Communication hardware and Modems

The first communications port on your PC is called COM1. Your PC can have additional COM ports, each with its own port number and address. The second port would be addressed as COM2, with additional ports at COM3, COM4, and so on. Communication ports are also sometimes called Serial ports or, for the more technically inclined, RS-232 ports.

One of the devices you can attach to one of your PC's communications ports is called a Modem. This is a word made up from two other words — "Modulator" and "Demodulator", which describes in somewhat technical terms what this device does. A modem is a device which translates computer data into sound which can be transmitted over a telephone line, and from sound back into computer data at the other end.

So, in a sense, a modem does the same thing for computer data as a telephone receiver does for your voice — converting sound to electrical impulses, transmitting those impulses over a telephone wire, then changing those impulses back to sound at the other end of the line.

Instead of sending sounds, the modem sends data from your PC to another computer, but before it can do that, it must be told what data to send.

Communication software

You probably already know that without software applications, your PC isn't very useful. Each application you use has a specific task in which it specializes — a word processor lets you create and edit text files, a database program lets you store and retrieve information in a structured format, an accounting program computes the state of your personal or business finances.

Just as you would use your Word Processor to write and print a letter, you use Communication software to tell your PC to send that letter to another computer using the Modem.

The Communication software does the job of talking to the PC and the modem, dialing and connecting to other computers, and sending data back and forth. Using the software is not much more complicated than telling it what number to dial, and what files you want to send and receive. We'll show you exactly how easy it is in the following section.

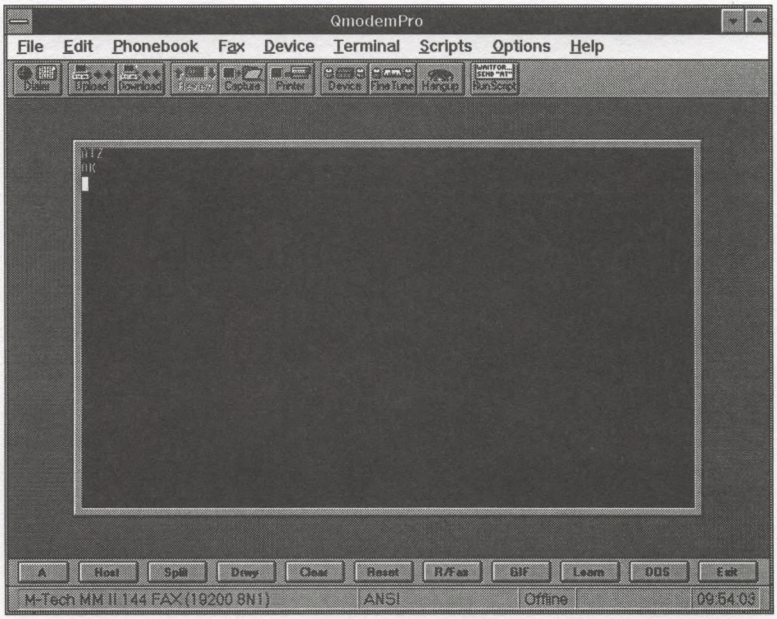
A quick tour of *QmodemPro for Windows*

Now that we've discussed the theory, let's take a few minutes to get some practical experience with *QmodemPro for Windows*. We assume Windows has already been installed on your computer, that your modem is correctly installed and connected to a telephone line, and that you've also installed *QmodemPro for Windows*.

Starting *QmodemPro for Windows*

Find the *QmodemPro for Windows* program group in your Program Manager window, and double-click on the *QmodemPro for Windows* icon.

It will take a few seconds for the program to load. When it has finished loading, your screen should look something like this:


QmodemPro
File Edit Phonebook Fax Device Terminal Scripts Options Help
Dialer Upload Download Preview Capture Printer Device FineTune Hangup RunScript
ATZ
OK
A Host Split Draw Clear Reset R/Fax GIF Learn DOS Exit
M-Tech MM II 144 FAX (19200 8N1) ANSI Offline 09:54:03

Say "Good morning," Modem . . .

First, let's quickly verify that the modem is installed, connected to the right COM port, and responding to commands. Type

```
AT ENTER
```

If the modem responds with

```
OK
```

we're ready to go on to the next step. If it doesn't respond, or if you see garbage characters on the screen, something isn't set up properly. Refer to the **Troubleshooting** section of the appendix, near the back of this manual, for some possible solutions. If you are unable to solve the problem on your own, try making a quick call to MSI Technical Support for help. You'll find the phone number in the Customer Access brochure, or in the section on Technical Support at the end of this chapter.

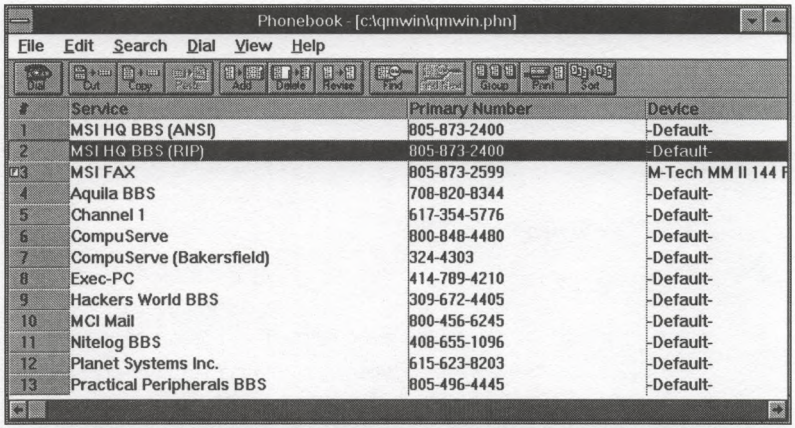
Dialing the MSI HQ BBS

Mustang Software, Inc. operates a *Wildcat!* BBS (Bulletin Board System) to support our customers and provide access to files and messages that can help you use *QmodemPro for Windows*. We call it the MSI HQ BBS.

The telephone number for the MSI HQ BBS is the first entry in your *QmodemPro for Windows* Phonebook. This is a toll call for most people, so keep this in mind when dialing. You may wish to wait for evening or night rates. The complete call should take no longer than about 15 minutes.

Pop up the Phonebook

Click on the **Dialer** button near the top left corner of your *Qmodem for Windows* screen. A new window will open, containing your **Phonebook.**


Phonebook - [c:\qmwin\qmwin.phn]
File Edit Search Dial View Help
Dial Cut Copy Paste Add Delete Revise Find Find Next Group Print Sort

#	Service	Primary Number	Device
1	MSI HQ BBS (ANSI)	805-873-2400	-Default-
2	MSI HQ BBS (RIP)	805-873-2400	-Default-
3	MSI FAX	805-873-2599	M-Tech MM II 144 F
4	Aquila BBS	708-820-8344	-Default-
5	Channel 1	617-354-5776	-Default-
6	CompuServe	800-848-4480	-Default-
7	CompuServe (Bakersfield)	324-4303	-Default-
8	Exec-PC	414-789-4210	-Default-
9	Hackers World BBS	309-672-4405	-Default-
10	MCI Mail	800-456-6245	-Default-
11	Nitelog BBS	408-655-1096	-Default-
12	Planet Systems Inc.	615-623-8203	-Default-
13	Practical Peripherals BBS	805-496-4445	-Default-

The *QmodemPro for Windows* Phonebook is a list of all the Bulletin Board Systems and Online Services you call regularly. You can add, delete, and rearrange items on this list.

Qmodem for Windows comes with a sample phonebook, with one entry —the MSI HQ BBS.

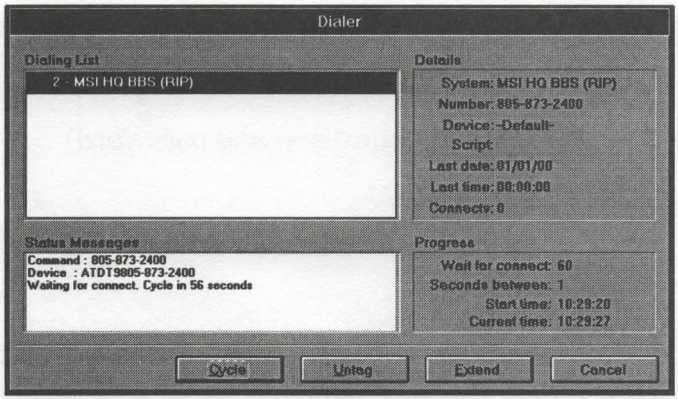
Select MSI HQ BBS

To select the entry you wish to dial, move the mouse pointer to the entry, and click the left mouse button. When you do that, your selected entry is highlighted —that is, it changes color on your screen.

Dialing and connecting

Now you're ready to dial the entry you just selected. Move your mouse to the **Dial** button near the top left corner of the Phonebook window (it has a little picture of a telephone), and press the left mouse button.

Another window will pop up, showing the name of the system you're calling, details about the entry including how many times you've called, and a status report which shows the number you dialed, and the response from the modem —ringing, busy, connected, and so on.



If the number you're dialing is busy, *Qmodem for Windows* will pause for a few seconds and try again. The MSI HQ BBS has over two dozen phone lines, so it should only take a few tries to get through if the line is busy on your first try.

When your modem connects successfully with the modem at the other end, you may hear some beeps and squawks as the modems "handshake" or establish a connection. At this point, the modems are exchanging information about the baud rates and connect speeds they support, along with additional information about error correction protocols.

When the modems have completed their handshaking, the phonebook window and status window will disappear, returning you to the **terminal window**. At this point, the remote system (in this case the MSI HQ BBS) will begin sending data, which you will see on your screen.

Entering commands

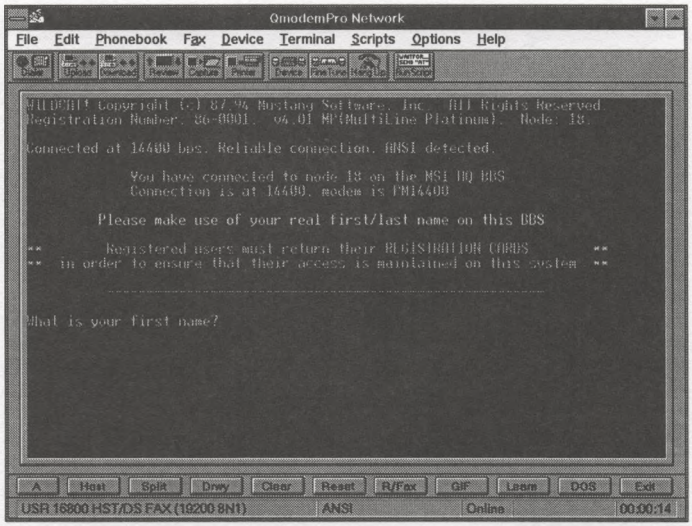
Most bulletin board systems have a **command line** interface. That is, they display a menu of available commands, and the user types the letter highlighted on the menu to execute the command. Some Bulletin Board Systems also allow you to enter commands by selecting and clicking mouse buttons on the screen, so long as the BBS and your communications software are both are capable of **RIPscrip** terminal emulation.

The MSI HQ BBS offers RIPscrip emulation, and so does *QmodemPro for Windows*. After this tutorial is over, you might like to set the terminal emulation in the dialing directory entry to RIPscrip, and try calling back.

Logging on (entering your name and password)

The first screen of information you see on the screen will normally be a brief message identifying the name of the system you've called. You'll then be asked to **log on**.

Logging on means typing your **user ID** (usually your first and last names) at the prompt asking you for this information. At MSI HQ BBS, the logon screen may look something like this:


QmodemPro Network
File Edit Phonebook Fax Device Terminal Scripts Options Help
Dialer Upload Download Review Capture Printer Device Fine Tune Hang Up Run Script
Connected at 14400 bps. Reliable connection. ANSI detected.
You have connected to node 18 on the MSI HQ BBS
Connection is at 14400, modem is FM14400
Please make use of your real first/last name on this BBS
Registered users must return their REGISTRATION CARDS
in order to ensure that their access is maintained on this system
What is your first name?
A Host Split Draw Clear Reset R/Fax GIF Learn DOS Exit
USR 16800 HST/DS FAX (19200 8N1)
ANSI
Online
00:00:14

Type your first name at the prompt, and press ENTER to continue.

You'll then be asked to enter your last name. Type your last name, and once again press ENTER to continue.

The BBS will then search its user database for your user ID. Since you're a new user on the BBS, you won't yet be in the database and the BBS will say something like

```
Your name was not found in the user database.
Is your name spelled correctly?
```

Answer **Yes** to this question if you spelled your name correctly. The BBS will then create a new user record for you, and you'll be asked to select a password.

Think carefully about the password you select. It should be one you can remember easily, but would be difficult for someone else to guess, since this password is your key to the Bulletin Board System. Do NOT use your first name, your spouse's name, or names or words easily associated with you.

The best passwords are a combination of two unrelated words separated by a punctuation mark, for instance

```
PENCIL$CABBAGE
```

Later on, we'll show you how to enter your password in the phonebook for each system you call, and recall it instantly with a function key.

What to do if you are asked for a password, and you've never called before . . .

Some people with common names (like "Jim Smith" or "Mary Jones") may find that someone else with the same first and last names has already set up a user account on the BBS. If you logged on with the same name as a user already on the system, you'll be asked to enter your password. Since you obviously don't know the password, the easiest thing to do right now is hang up and try again. Use the **Hang up** button on the Tool Bar to do this.

Since each user name must be unique, you might want to consider using first name plus your middle initial and last name to identify you. To log on

with a middle initial, enter your name like this, at the "What is your first name" prompt:

```
Jim M; Smith ENTER
```

Note the semicolon after your middle initial — this notifies the Bulletin Board System that the text "Jim M" should be treated as the first name, and the text "Smith" should be treated as the last name.

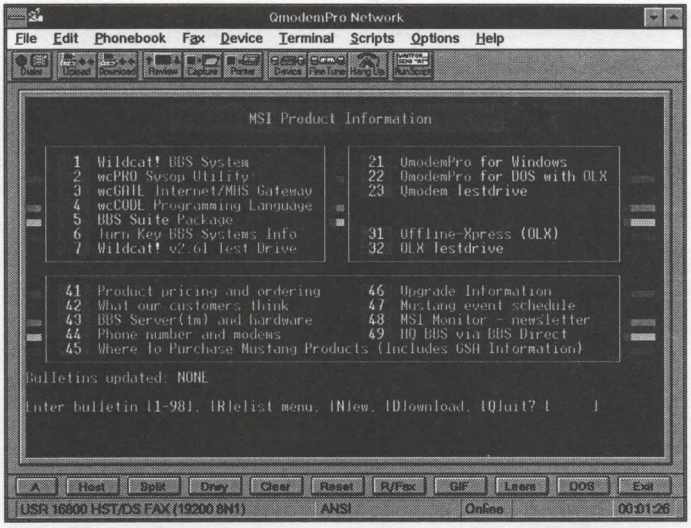
Answering the newuser questionnaire

As part of the new user logon procedure, the operators of the BBS will ask you for some demographic information — your mailing address, phone number, and your *QmodemPro for Windows* registration number. You will find this number stamped on the card bound inside the cover of this manual.

MSI (the makers of *QmodemPro for Windows* and other communication software) uses this information to determine customer needs and preferences when planning future product releases. The information you provide is confidential, and is not sold to mailing list companies, nor is it made public in any other way.

The next part of the questionnaire lets you define settings such as color or graphical menus, file transfer protocol and message reading mode, and suggests the response which is correct for most users. Remember, you can always go back and change your settings later, so don't worry if you don't understand what some of the selections mean at this point.

When your new user information has been stored, you will be back in the Bulletin Board System. The BBS will then ask you if you'd like to see the Bulletin Menu. Answer **Yes**.


QmodemPro Network
File Edit Phonebook Fax Device Terminal Scripts Options Help
MSI Product Information
1 Wildcat! BBS System
2 wcPRO Sysop Utility
3 wcGATE Internet/MHS Gateway
4 wcCODE Programming Language
5 BBS Suite Package
6 Turn Key BBS Systems Info
7 Wildcat! v2.61 Test Drive
21 QmodemPro for Windows
22 QmodemPro for DOS with OLX
23 Qmodem Testdrive
31 Offline-Xpress (OLX)
32 OLX Testdrive
41 Product pricing and ordering
42 What our customers think
43 BBS Server(tm) and hardware
44 Phone number and modems
45 Where To Purchase Mustang Products (Includes GSH Information)
46 Upgrade Information
47 Mustang event schedule
48 MSI Monitor - newsletter
49 HQ BBS via BBS Direct
Bulletins updated: NONE
Enter bulletin [1-98], [R]elist menu, [N]ew, [D]ownload, [Q]uit? [ ]
A Host Split Dmy Clear Reset R/Fax GIF Learn DOS Exit
USR 16800 HST/DS FAX (19200 8N1) ANSI Online 00:01:26

Reading the bulletins

You don't need to read all the bulletins now, but if you're interested in any of the ones offered, type the number of bulletin you'd like to look at, and press ENTER. To leave the bulletin menu, press ENTER without typing a bulletin number.

When you leave the Bulletin Menu, you'll arrive at the Main Menu. This is the point from which you can select all the options the BBS has to offer: file transfers, e-mail, doors to other applications, and more.

Leaving a message to the System Operator (SYSOP)

The next thing we'll do is leave a message to the SysOp of the MSI HQ BBS, asking for permanent access to the BBS as a registered customer. This accomplishes two things: it shows you how to enter a message on a Bulletin Board System, and it also registers you for full access to MSI's customer support BBS including special message areas and file areas.

From the **BBS Main Menu**, select **Comment to Sysop**. Type C at the prompt.

The message entry screen looks like a word processor, with a ruler line at the top, and line numbers down the side. Type a message something like this:

```
Hello, Sysop. This is my first call to the BBS using
QmodemPro for Windows, and I would like to ask you to
upgrade my access. My registration number is ...
```

Type the registration number, which is stamped on the registration card bound next to the cover of this book. End the message by pressing your ENTER key twice or, if you're in the full screen editor, by pressing your ESC key once. A list of options will then appear on your screen. Select **Save** to send your message to the System Operator (SYSOP). You will then return to the Main Menu.

Transferring a file

The final part of our on-line tutorial will be to **download** (transfer) a file. Downloading means copying a file from the remote computer (the host, or BBS, or Online Service) to your computer over the modem, using a file transfer protocol.

Press F at the **Main Menu**. The BBS will then show you the **File Menu**. This menu has a list of selections having to do with file transfers. For instance, you can search for a file, list the names and descriptions of files on the system, or view the contents of a file you're interested in.

We have created a special file for this tutorial. It contains a selection of sample scripts and other useful tools for *Qmodem for Windows* users. The name of the file is QWSAMPLE.EXE.

The most important thing to remember about transferring a file is that you need to tell the computers at *both* ends of the connection what you want to do. The **host** computer (the BBS or Online Service) needs to be told first. You do this by selecting **Download** from the file menu — as with our previous examples, type the first letter of the command, in this case **D**.

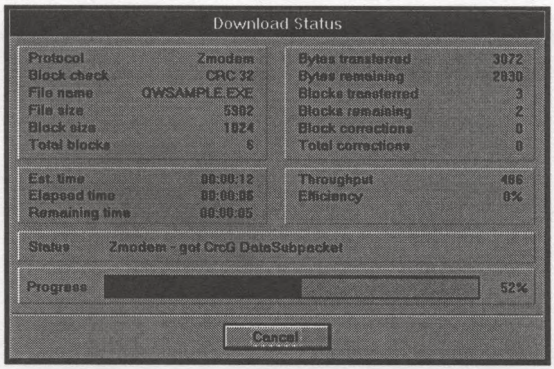
The BBS will respond by asking you the name of the file you want to download. Type

```
QWSAMPLE.EXE ENTER
```

The BBS gives you the option to select several files, and download them in a batch. Since we are only going to download one file during this session, press your ENTER key again when prompted for the second file. The BBS will then ask you if you'd like to logoff automatically when the download has finished. Since we're just about finished with this tutorial, answer **Yes** to this question.

Next, the BBS will ask you to select a file transfer protocol. Later on in this book, we'll explain more about the different file transfer protocols and their characteristics. For now, we recommend you select **Zmodem** by typing **Z** at the prompt.

The BBS will begin sending the file, and *QmodemPro for Windows* will begin receiving it automatically. Below is a picture of the file transfer status window, showing information about the file transfer in progress.



We will explain more about each part of this window later on in this book. When the file transfer is complete, the download status window will disappear, and you will once again see the terminal screen.

Disconnecting

Since you selected **Logoff after transfer** before you began downloading your file, the BBS will now display a 10-second countdown. This countdown gives you the opportunity to change your mind and stay on-line by pressing a key. For now, let the countdown finish. The BBS will automatically log you off and hang up the phone.

What do I do with the file I just downloaded?

The file you just downloaded is a self-extracting archive — that is, it acts as a container for a number of smaller files inside, which unpack automatically when you execute the file. To remove the files from their container, go to the **File** menu and select **DOS Shell**. *QmodemPro* will open up a DOS window on your screen.

Use the DOS **CHDIR** command now to change to your **Download directory**. If you are unfamiliar with DOS commands, and the concept of directories and subdirectories, refer to your DOS manual, or ask a knowledgeable friend or co-worker for help.

The default download directory is C:\QMWIN\DOWNLOAD. If you changed the default, type the drive and path for your actual download directory instead. When you are in that directory, type

```
QWSAMPLE ENTER
```

to extract the files from their container. Later on, you can use DOS or the Windows File Manager to move them to an appropriate location on your hard drive.

To close the DOS window, type

```
EXIT ENTER
```

at the DOS prompt.

Quitting *QmodemPro for Windows*

Now that we've completed the tutorial, it's time to shut down *QmodemPro for Windows*. Use your mouse to go to the **File** menu, and select **Exit**.

For more information

No single manual can tell you everything you need to know about computers and modem comrnunications. There are many additional sources of information, assistance, training and help. We hope you find the following list of resources useful.

Online Help

For general help about the program, or to search for a particular command or topic, go to the menu bar and click **Help** with your mouse, then select **Contents**.

The first screen you see will be a list of general help topics from which you can select the particular topic you're interested in. Move your mouse pointer over the topic you wish to view, and click the left mouse button.

Most dialog boxes also have a **Help** button, which displays a help screen with information related to the specific functions available in that dialog box.

Technical Support Services

Mustang Software, Inc. strongly believes in providing quality software at a reasonable price. We back our products with technical help when our registered users need it. Please send in your registration card to enroll in our technical support plan.

Until we receive your registration information, our staff cannot provide you with technical support via our BBS or by phone.

Benefits of Sending Your Registration

- Free technical support by phone Monday through Friday between 9 a.m. and 5 p.m. Pacific time
- Automatic notification of major program updates
- Additional program updates at a reduced rate

- Periodic mailings of the *MSI Monitor*, Mustang Software's newsletter. The *Monitor* contains information about new product releases and updates, technical tips, and other product information.
- 24-hour access to the private multi-line Registered User's *Wildcat!* HQ BBS at Mustang Software
- BBS access to download utility programs written by MSI staff and other authors which enhance and add features

Technical Support

QmodemPro for Windows is designed to be easy to use, and this manual should contain the answers to most of your questions. Read it first. Make use of the online help, and check the appendix for troubleshooting procedures. If you're still stumped, technical support is only a phone call away.

You may first want to call our private *Wildcat!* BBS for Registered Users at 805-873-2400, and leave a quick question for our technical staff. This is a particularly useful way to receive expert guidance with the more advanced features.

Note: If you have your registration number handy, you can get full access on your first call. The System Operator (Sysop) will make your access permanent if you leave a message requesting upgraded access.

Another alternative is CompuServe where we sponsor a part of the PC Vendor Support Forum. You reach us by typing GO PCVENA at any CIS prompt and then selecting Subtopic 9. Our PIN is 75236,3312.

Support is also available on GEnie in the Qmodem Support Roundtable. Type QMODEM at any GEnie menu prompt to reach the support section. We can also be reached at America Online, in the Mustang forum.

Our Internet mailing address is support@mustang.com.

Support is not available by mail or Fax.

If you are still unable to find the answer to a question—or if you need a quick explanation, please call us Monday to Friday between 9 a.m. and 5 p.m. Pacific time.

When calling for support please:

- Have your registration number handy (it is printed on the registration card bound inside the cover of this manual).
- Record your Registration number here:
- _____
- Be at your computer with your manual handy.
- Be ready to describe the problem in detail.
- If possible, be ready to duplicate the problem on your system.
- **You can call technical support at (805) 873-2550.**

QmodemPro for Windows is constantly undergoing enhancements and revisions. This is normal software maintenance. The current version of *QmodemPro for Windows* may be a major or minor release. We encourage you to keep your software updated—we can provide the best support to users who are running the current major release. The cost is minimal and the benefits are great.

Publications

If you're interested in learning more about modem communications and the on-line community, we recommend the following publications:

Using Computer Bulletin Boards, 2nd edition, by John V. Hedtke (1992, MIS Press, ISBN 1-55828-196-7). This book explains in easy to understand terms how to log on to a BBS, how to read and answer e-mail messages, how to transfer files, and much more. Ideal for the beginner who wants practical, non-technical information.

Guide to PC Telecommunications, 2nd edition, by John Dvorak and Nick Anis (1992, McGraw Hill, ISBN 0-07-991787-0). Over 1000 pages of information on communications, BBSs, on-line services, and more. Read-

able and entertaining, this book has lots of technical information geared towards the non-technical caller.

Boardwatch magazine, published monthly by Jack Rickard. Call 1-800-933-6038 for subscription information. Witty, well written, sometimes opinionated overview of BBS issues. Many good BBS lists, by region and theme.

User Groups

Most cities and towns have a PC User Group. These groups serve the non-professional computer user by providing social and educational meetings, special interest groups, informal classes for beginners, and guest speakers from the computer industry. Most also provide a Bulletin Board System (BBS) for their members.

Your local computer store or public library can provide information on PC User Groups in your area. If you work for a large corporation or government agency, your employer may also sponsor a PC User Group — ask your PC support people for more information.

The electronic community

The electronic community is no different from any other group of people with similar interests — people naturally like to get together to share their knowledge and experiences. By getting in touch with other people electronically, you can find people who know a little or a lot about anything you've ever heard of.

Initially, the electronic community is a good place to learn more about computers, modems, and telecommunications. You will soon find, however, that there are many more things to discuss on-line than just computers.

Your PC, modem, and communication software give you the chance to meet people far beyond your own physical community.

Bulletin Board Systems (BBS)

The on-line community is as close as your nearest Bulletin Board System. To help get you started, we've included a text file containing a list of bulletin board systems using *Wildcat! BBS* software from MSI. Later on, you'll learn how to use the *QmodemPro for Windows* file viewer to view this list of BBS phone numbers, and locate BBSs in your local calling area.

Commercial on-line services

Besides the Bulletin Board Systems in your own area, there are several national and international commercial on-line services. Your *QmodemPro for Windows* package may contain informational brochures on how to subscribe to one or more of these on-line services.

3 - Using QmodemPro

Show me a hero and I will write you a tragedy.

F. Scott Fitzgerald

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Marking and Pasting text on the screen 61
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Uploading and Downloading files 64
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Starting *QmodemPro for Windows*

There are several ways to start *QmodemPro for Windows*.

From the Program Manager, *QmodemPro for Windows* Program Group

Find the *QmodemPro for Windows* program group in your Program Manager window, and double-click on the *QmodemPro for Windows* icon.

From the Program Manager, File menu

Select the **File** menu, and click on the **Run ...** command. In the text window that pops up, type

```
QMWIN ENTER
```

From the Program Manager, Startup Group

Drag the *QmodemPro for Windows* Icon into the **Startup Group** for automatic execution whenever you start Windows.

You can also pass parameters on the command line to start *QmodemPro for Windows* with a particular phonebook file loaded, or to automatically dial a number or group of numbers, or execute a script. If you're interested in reading more about startup options, please refer to the **Command Line Options** section of Chapter 4, *Advanced Operation*.

The Terminal Window

Much of the terminology used in modem communications today dates back to a time when computers were large, expensive mainframe systems, isolated from the people who actually used them. People controlled these mainframe computers, and communicated with each other, from terminals connected by serial cable to the mainframe.

Since these terminals varied widely in capability and intelligence, a common denominator for serial communications evolved, so that simple transfers of text and data could be made from "dumb" terminals (a teletype printer or TTY, for example), while more sophisticated text positioning, graphics, and full-screen cursor movements could be made from a video display terminal (an ANSI terminal such as a DEC VT100, for example). We'll discuss terminal emulations in more detail later on.

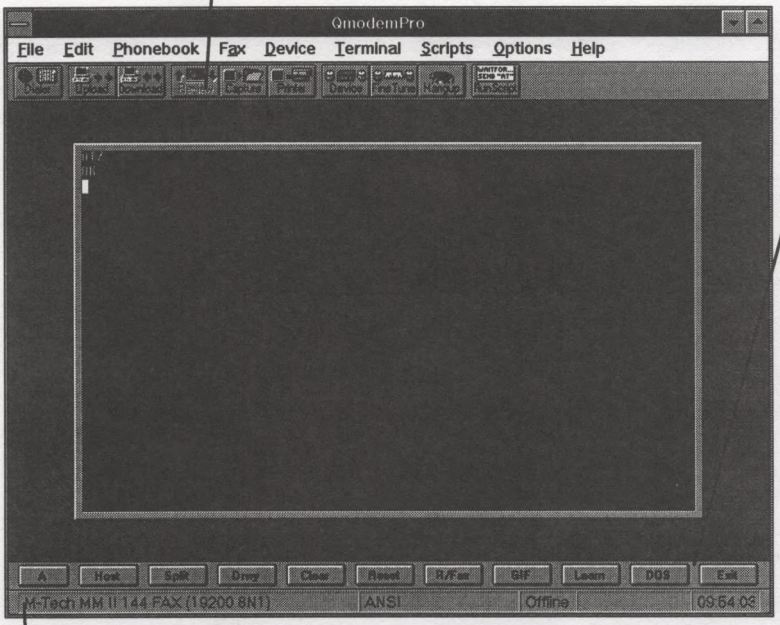
Obviously, there have been many advancements over the years in computers, and to some extent serial communications have kept pace. It is the combination of software and hardware that allow two computers to communicate, but a common denominator is still required. A personal computer running *QmodemPro for Windows* and connected by serial link to another computer behaves as a terminal on the remote computer.

QmodemPro for Windows's terminal window is, in a sense, the main control panel used to communicate with your own hardware (the modem or other device providing the first part of the link between your computer and the remote computer), and, once you're on-line, to control the remote device.

This window is surrounded by *QmodemPro's* main screen which provides information about the status of your connection, a menu bar with command options, a tool bar with buttons for frequently-used functions, and a status line at the bottom of the window, showing current parameters.

Tool Bar

The **Tool Bar** is a set of buttons which offer a shortcut to frequently-used menu commands. For instance, the Terminal Window has Tool Bar buttons for Dialer (Phonebook), Review (Scrollback), Upload, Download, Capture, and more. The Phonebook screen has Tool Bar buttons to Dial, Edit, (Cut, Copy and Paste), Delete, Revise, Group, Print and Sort phonebook entries.


QmodemPro
File Edit Phonebook Fax Device Terminal Scripts Options Help
A Host Split Dmy Clear Reset R/Fax GIF Learn DOS Exit
M-Tech MM II 144 FAX (19200 8N1)
ANSI
Offline
09:54:08

Macro Bar

The **Macro Bar** is a row of buttons which you can define as macros, text to send in response to a system prompt, modem commands, and more.

Status Line

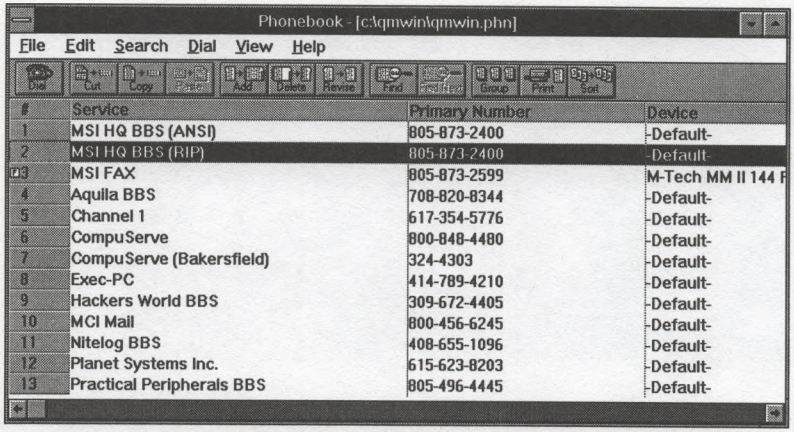
The **Status Line** displays current system information. The first field shows the name of the current device, and in parentheses beside it, the current port settings — baud, data, parity and stop bits. The second field shows the current terminal emulation. The third field shows on-line or off-line status, depending on whether the software detects a carrier signal from the modem. The fourth field displays the name of the current script, if a script is active. The fifth field shows the current time if off-line, or a timer for the current session if on-line.

The Phonebook

QmodemPro for Windows's **Phonebook**, or dialing directory, is a window organized in much the same way as your personal address book. Like your address book, it can contain information including the system name, telephone numbers, your logon name, password and communication parameters. You can add a note file to each entry, to record more detailed information and comments. And you can mark and organize entries into groups, for multiple dialing sessions.

Each Phonebook stores up to 4096 entries, and you can have an unlimited number of Phonebook files. The default phonebook filename is QMWIN.PHN. The filename and path of the current phonebook is printed on the Title Bar at the top of the Phonebook window.

The following screen shows the Phonebook:


Phonebook - [c:\qmwin\qmwin.phn]
File Edit Search Dial View Help
Dial Cut Copy Paste Add Delete Rewire Find Redial Group Print Sort
Service Primary Number Device
1 MSI HQ BBS (ANSI) 805-873-2400 -Default-
2 MSI HQ BBS (RIP) 805-873-2400 -Default-
3 MSI FAX 805-873-2599 M-Tech MM II 144 F
4 Aquila BBS 708-820-8344 -Default-
5 Channel 1 617-354-5776 -Default-
6 CompuServe 800-848-4480 -Default-
7 CompuServe (Bakersfield) 324-4303 -Default-
8 Exec-PC 414-789-4210 -Default-
9 Hackers World BBS 309-672-4405 -Default-
10 MCI Mail 800-456-6245 -Default-
11 Nitelog BBS 408-655-1096 -Default-
12 Planet Systems Inc. 615-623-8203 -Default-
13 Practical Peripherals BBS 805-496-4445 -Default-

The directory is organized in rows and columns, with information about each entry displayed horizontally across the screen. The first field, Number, is the entry's position on the list.

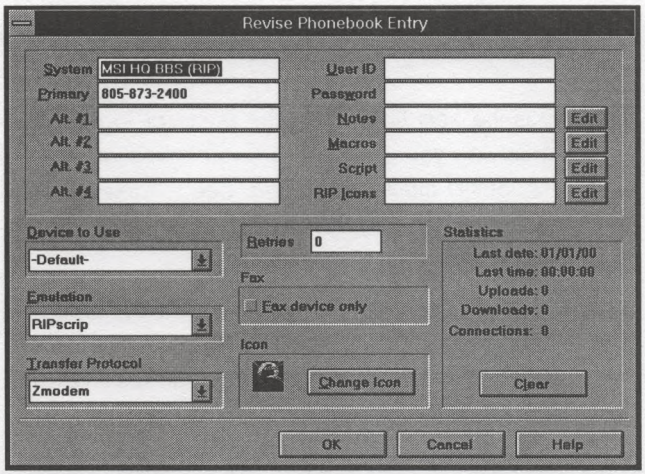
The next group of fields contain information about the service; for instance, the name and phone number for the service, your User ID, the name of a note file associated with the service, the date and time of your last connection, and so on. Use the scroll bars at the bottom of the window to view these fields.

Like the Terminal window, the Phonebook window has a menu bar and a toolbar.

Adding or Revising an entry

Use the **Add** button on the tool bar to add new directory entries, and the **Revise** button to edit an existing entry. The **Revise Phonebook Entry** dialog box will pop up, allowing you to edit or add information about the selected Phonebook entry.

You can revise a group of entries by tagging them and clicking the **Revise entry** button, or by typing ALT ENTER .



Filling in System Information

System name is the first item. This is the name of the service you call — for instance "MSI HQ BBS" or "CompuServe". When you have entered the system name, press your ⇆ (tab) key to move to the next field.

The next five entries are for telephone numbers. If the system you call has only one telephone number, enter it on the first line.

Many multi-user services have more than one telephone number — in this case use the **Alt. #** fields to enter additional numbers. When you dial an entry with multiple phone numbers, *QmodemPro for Windows* will call each one in succession until it connects.

Retries tells *QmodemPro for Windows* how many times to redial an entry if it does not connect on the first call. Set this value to zero (the default) to redial an entry continuously, or until you manually abort the redial.

To change the number of **Retries**, type the new value into the text box. Use this option with discretion — your local telephone company may have rules limiting the number of times you may dial a number within a certain period.

User ID is the next field. Enter the name or logon ID you use to connect with the service you are calling. The information in this field can be sent with a @USERID macro command. See Chapter 4, *Advanced Operation* for more information on macros.

The **Password** field is self-explanatory. Enter the password you use to connect with this service. This information stays hidden until you select the Password field to edit, and your password can be sent with a @PASSWORD macro command. See Chapter 4, *Advanced Operation* for more information on macros.

If you store your password here, you can recall it easily during logon with a keyboard macro or a logon script. This saves you the trouble of remembering many different passwords, and providing a measure of security for your on-line activities.

You should always take care to prevent unauthorized use of your logon accounts. Use a different password on every system you call. Computer security experts recommend using non-obvious passwords. Your own name or initials, the name or initials of your spouse, children and pets, are all poor choices for passwords — while they are easy for you to remember, they are also easy for a potential intruder to guess.

The next field is **Note.** *QmodemPro for Windows* allows you to attach a file to a phonebook entry. This can be any kind of file, and the same file may be attached to more than one phonebook entry. The name and path of the attached file are stored in this field.

This field has an **Edit** button, allowing you to select a Note file from a Windows Common Dialog Box.

QmodemPro for Windows uses the Note file in a special way. When you attach a note file to a phonebook entry and use the **Find** command on the Phonebook menu to locate and tag entries for dialing, the contents of the note file are searched along with the text in the System, UserID, Password and other text fields for matching text.

Macros is the name of the Macro file associated with this entry. The Macro file contains a set of macro assignments for the buttons below the terminal window. This option allows you to customize your keyboard's operation for each system.

Script is the name of the script file *QmodemPro for Windows* will execute whenever you dial and connect with this Phonebook entry. If the script file does not exist on disk, *QmodemPro for Windows* will create one for you automatically, in QuickLearn mode. For an in-depth explanation of the SLIQ Script Language, refer to Book 2 of this documentation.

RIP Icons is the path for RIP (Remote Imaging Protocol) icons associated with this phonebook entry. Bulletin Board Systems making use of the RIPscrip terminal emulation may have their own set of icons, which are stored on your hard drive, and which are displayed automatically when you view the BBS menus and screens.

Since different Bulletin Board Systems may use similar filenames for RIP icons, you may wish to store icons associated with a particular BBS in a separate directory. An entry here will override the default RIP Icon path specified in the **Options/Files/Path Definitions** dialog box.

The **Device to use** list box lets you select the hardware **device** from which the call should be made. This option allows you to use a variety of devices, including one or more modems in your desktop PC, including Fax modems. Other devices such as network modems are also supported, providing the proper drivers are installed in Windows.

The next field is **Terminal Emulation.** Your PC emulates, or imitates, a terminal during a communications session, and many different types of terminals are supported by *QmodemPro for Windows*. **Terminal Emulation** controls the way your computer sends, interprets and receives keyboard and video information from the host computer. This option allows you to select the terminal emulation you wish to use for this system. In most cases, the best choice is **ANSI**.

On host systems that support RIP (Remote Imaging Protocol) graphics, try the **RIPscrip** emulation. On mini or mainframe systems, ask the system administrator for guidance on which terminal emulation is best for the applications you want to run.

Next, select the default **file transfer protocol** you wish to use with this system. In most cases, the best choice is Zmodem. You'll find a more detailed discussion of transfer protocols later on in this chapter.

The next item is **Fax Device Only.** Toggle this item **on** if you want to send Faxes to this phonebook entry using *QmodemPro for Windows* and your Fax modem.

Next, if you like, you can attach a Windows **Icon** to a phonebook entry. A number of sample icons have been already been installed in your *Qmodem for Windows* home directory. There are dozens of others in your Windows directory, stored in a file named BBSICONS.DLL. You can view your phonebook as a collection of icons, as text only (the default), or as icons plus text, by changing the **Phonebook/View** options.

QmodemPro for Windows keeps track of **statistics** for each entry: the number of calls to a system, plus the date and time of your last call, the number of uploads and downloads. The **Clear** button will reset the statistics for this system to zero.

Deleting an entry

The **Delete** button will remove tagged entries or pending Fax messages from your phonebook. A confirmation window will pop up before the entry or entries are deleted. Be careful with this option — once an entry has been deleted, it is gone, and can't be recovered.

Dialing an entry

Use the **Dial** button on the tool bar to begin dialing selected entries in numerical order, or press ENTER or double-click on the selected entry. The Redialer will cycle through the tagged entries until a connection is made. Press ESC to halt the process.

When *QmodemPro for Windows* connects, the screen will clear. *QmodemPro for Windows* plays the sound you have selected for a successful connection (if you have turned on **Options/Sounds** and you have a sound card or a sound driver for your PC speaker), goes into terminal mode and allows you to log into the remote system.

Finding an entry

The **Find** command scans the phonebook for a specific text string. Entry Names, Phone Numbers, UserID, Password, Script, Macro, and RIP fields are searched starting with the current entry. Searching can be done forward or backward from the current entry. Any file linked to the Note field is also searched.

The find dialog box has a data entry field for the Text to Find, and three option buttons. The option buttons are **Find Next**, which searches for each matching entry; **Tag All** which automatically finds and tags all matching entries; and **Close**, which returns to the Phonebook dialog box.

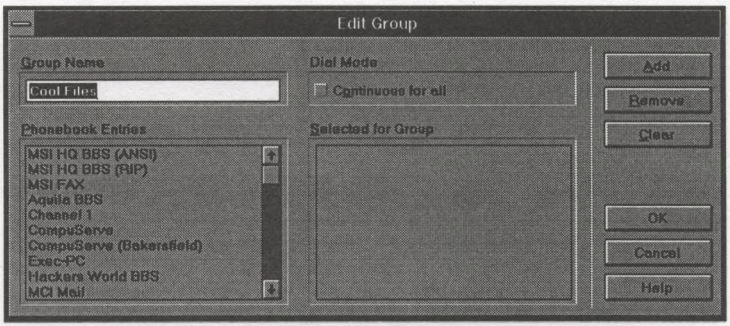
Group dialing

Selected phonebook entries can be saved as groups. These groups can be used for a variety of purposes, for instance you may select a group of entries and dial them immediately, or tag them for further processing from the Phonebook window.

To create a group, select the **Group** button on the Tool bar. This pops up a dialog box with a window listing groups, and several control buttons. The first two buttons, **Add** and **Update**, operate similarly, and are used to create and edit groups.

Creating a group

Use the **Add** button to create a new group. The following dialog box will appear:



Use the Group Name field to store the name of the group. Use a descriptive name such as "Mailrun" or "Games" or "Local BBSs" or anything else that describes what these systems have in common. Note that you can add the same Phonebook entry to more than one group.

The **Continuous Dial** toggle in the next field causes *QmodemPro for Windows* to dial each entry until you have connected with each system on the list.

The next two fields are selection lists. The left window lists all your Phonebook entries, while the window on the right side lists the entries you have selected for your Group. To select an entry, highlight the system in the **Phonebook Entries** list, then press ENTER, or select the **Add** control button. That name will then be copied automatically to the **Selected for Group** list. You can also double-click to add an entry.

To remove an entry from your Group, go to the Selected for Group window, highlight the entry you wish to delete, and press ENTER or select the **Remove** control button. To remove ALL entries from a group, select the **Clear** control button. You can also double-click to remove an entry.

When you have finished building or revising your group list, select **OK** to save. You will then be returned to the Group Options dialog box.

Revising a group

To revise a group, highlight the group you wish to edit, then select the **Revise** button. The Revise dialog box operates in exactly the same way as the Add dialog box for adding and removing entries in your group.

Deleting a group

To delete an entire group, highlight the group or groups you wish to remove, and select the **Delete** button.

Tagging a group

The **Tag** button highlights (tags) all group entries in the current phonebook. When the entries are tagged, you can go back to the Phonebook window and perform other operations on the tagged entries, for instance dial, delete, or revise.

Dialing a group

Use the **Dial** button or press ENTER to begin dialing all members of the group. The Dialer dialog box will appear, showing the progress of the current call.

Editing a group

To edit the phonebook entries for a group, select your group, then press ALT ENTER. The **Revise Entry** dialog box will pop up, allowing you to edit and save each entry in your group.

Loading a different Phonebook

The **File/Open** menu command allows you to load a different phonebook from disk. You can have as many Phonebook files as you want, stored anywhere on your hard drive. You can create additional Phonebooks by opening the Phonebook and selecting **File/Open.** Type the name of the phonebook you'd like to create (the extension .PHN is optional), and click **OK.**

Manual dialing

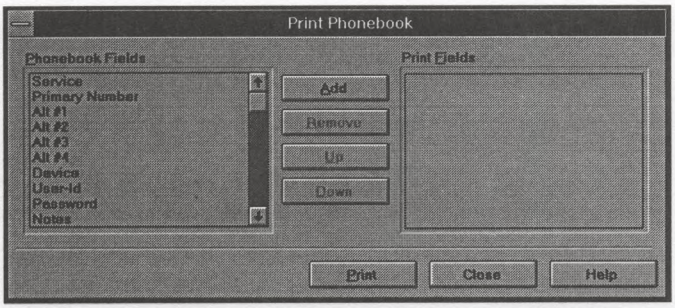
The **Manual Dial** button allows you dial a number that is not in your Phonebook. Manual dial commands may contain up to 40 characters, and *QmodemPro for Windows* does not check the data for validity. The data typed in the Phone Number field will be passed to the modem as if it was attached to a real entry. Any Prefix modifier will be substituted accordingly.

Packing the Phonebook

You may notice that when you delete entries from the Phonebook, the size of the file on disk does not decrease. This is because deleted records are not automatically removed from the file. Use the **Pack** command on the **File** menu to remove deleted record space from your Phonebook file, and shrink the file back down to a more manageable size.

Printing the Phonebook

The **Print** button allows you to copy selected information from your phonebook to a printer or to a disk file.



A dialog box with a list box allows you to select any combination of fields in your Phonebook to print. Highlight each field you would like to print, and use the **Add** button to add them to the list on the right side of the dialog box. Use the **Up** and **Down** buttons to change the order of fields in your list.

When you are satisfied with your selections, click the **Print** button. This pops up the standard **Print** dialog box.

Click the **Setup** button if you want to change the default printer, or click the **Print to File** check box to redirect the output to a DOS text file.

The output from the print phonebook command is one record per line, and is not formatted for line length. You should take your printer's maximum line length into consideration when selecting fields to output.

Sorting the Phonebook

This option allows you to **Sort** the current phonebook. Any of the fields can be used as the primary sort key, and you can sort in ascending or descending order.

For example, if you wanted to sort the phonebook so that the entry with the highest number of calls comes first, and the least called entry at the end, you would select Total Connects from the Phonebook fields list, add it to the Sort fields list, select the Descending button, then click **OK**. As

with the **Print Phonebook** dialog box, the **Up** and **Down** buttons can be used to rearrange entries on your list.

Tagging entries in the Phonebook

Tagging is a way to build a queue of entries to dial, revise, copy, cut or delete. There are several ways to select and tag phonebook entries, all following the standard Windows procedure for selecting single and multiple entries.

With a Mouse

Click the first item you want to select, and the drag the cursor to the last item you want to select.

To cancel the selection click on any item after doing the above.

Or click the first item you want to select, hold down the SHIFT key, and click on the last item you want to select. This will select the first and last items, and all items between.

To select non-sequential items, hold down the CTRL key and click each item you want to select. To cancel a selection hold down the CTRL key and click the selection again.

From the Keyboard

Use the up and down arrows to select an individual item. To select more than one item hold the SHIFT key down while pressing the up and down arrows to select a group of entries.

To select all items from the current item to the beginning of the phonebook hold down the CTRL key and the SHIFT key and press HOME. To select all items from the current item to the end of the phonebook hold down the CTRL key and the SHIFT key and press END.

To select multiple entries activate **Add mode** by pressing SHIFT F8. The focus indicator (the dotted box) can then be moved independently of the selection highlight, allowing additional entries to be highlighted by pressing

SPACE . When the desired entries are selected, turn **off** Add mode by pressing SHIFT F8 again.

You may then return to the Phonebook window to further process the tagged entries. Note that this operation first un-tags any tagged entries in the Phonebook, then applies tags to the entries in the group.

Connecting and logging on

Once you've dialed the host system you want to connect with, the next step is to log on. Logging on means identifying yourself to the host computer by typing your name or user ID, and your password.

If the system you call is connected through a telephone network to a local access number, you may first need to hit the ENTER key a couple of times to wake up the network, then identify the service you wish to reach, for example "CIS" for CompuServe Information Service.

Most host systems, whether they are Bulletin Board Systems, Online Services, or private computer systems, offer some kind of prompt or menu system to give callers an idea what kind of input the host computer is expecting. If you're lost, type a question mark character or the word "Help". Most services offer at least some level of on-line help.

For a detailed, step by step description of how to log onto a BBS, enter a message, and download a file, please review the tutorial in Chapter 2 of this manual. While the commands and prompts might vary somewhat from one host system to another, the same concepts and procedures will apply to most computers you call.

In most cases, the logon will proceed smoothly. If it doesn't, for instance if your terminal window fills up with garbled characters instead of the text you were expecting, refer to the appendix at the end of this book, in the section on troubleshooting and problem solving. If you can't make sense of what you're seeing on the screen, use the **Terminal/Hangup** command or click the hang-up button in the Tool Bar to disconnect, then review your settings and try again.

Marking and Pasting text on the screen

Using the mouse, you can mark text on your screen during an on-line session, and send it to the modem. This is a useful way to grab a file name from a listing, then download the file, without ever having to type the name again.

To mark text on the screen, move the mouse pointer to the beginning of the text you want to mark. Hold down the left mouse button and drag the mouse to the end of the block of text, or double-click to mark the entire word under the mouse cursor. The marked text will be highlighted in a contrasting color.

To send the marked text to the modem, click the right mouse button. To send text without sending a carriage return, hold down the CTRL key while clicking the right mouse button.

You can also mark text on your screen and copy it to the clipboard using the **Edit/Copy** menu choice, or send text that is already in the clipboard to the modem by choosing the **Edit/Paste** menu command.

The following shortcuts are available when copying and pasting text in the terminal screen:

- Double-click a word to copy the word to the clipboard
- Click the right mouse button to copy the clipboard to the screen
- Copied text automatically has a carriage return/linefeed appended. To suppress the carriage return/linefeed, hold down the CTRL key when you click the right mouse button.

Recording your Session

You may wish to keep a temporary or permanent record of your on-line connection. *QmodemPro for Windows* provides several ways to capture this data.

Capture file

The **Capture File** saves a record of all characters received to a disk file. As new information appears on the screen, that information is appended to the capture file. If you save your on-line sessions in a capture file, you can go back and refer to them later. This is a handy way to save bulletins, messages and other information to review after you've disconnected from the BBS or on-line service.

To open the Capture File, click on the **Capture** button on the tool bar above the terminal window. A Windows common dialog box will pop up, allowing you to assign a name, directory and drive letter to your capture file.

Scrollback

The **Scrollback** is very similar to the Capture File, except that your session is recorded in a memory (RAM) buffer instead of a disk file. You can view the Scrollback buffer and save copies on disk of the current screen, or the entire scrollback session.

To activate Scrollback, select **Terminal/Scrollback** or check the **Scrollback** button on the tool bar. When Scrollback is activated, a set of scroll bars appear on the right side of the screen, allowing you to look back over the recorded session.

There is a limit to how much data the scrollback buffer can store in memory during a session, and once that limit is reached, the oldest data is removed to make way for new incoming data.

Trap screen

If you need just a quick way to record a specific screen to disk, rather than recording an entire session in the Capture File, use the **Edit/Screen to File** command. An image of the screen will be saved in a disk file. A Windows common dialog box will pop up, allowing you to select the default file name or enter your own.

Log file

The **Log File** is a condensed report of your on-line session. When you set the **File/Log Toggle** to **on**, the log file records dates, times, names of files uploaded and downloaded, certain internal program events and error messages. A complete list of log file messages is in the Appendix at the end of this book.

Printing

The third way to capture data is to use the printer. Printing works in the same way as the Capture function, in that the entire on-line session is recorded, in this case to the printer.

Uploading and Downloading files

Uploading and Downloading refer to the act of copying a file from one computer to another over a modem connection, using a transfer protocol.

A transfer protocol is a set of signals and responses combined with the data being transferred. Protocols provide error checking and correction, and monitor the progress of the file transfer.

When you are sending a file from your computer to another computer, the process is called *Uploading*. A file is *Downloaded* when it is sent from another computer to your computer.

Batch transfers

Some file transfer protocols allow you to transfer a batch of files during a single session. These protocols include Ymodem and Zmodem.

Although the exact procedure for starting a batch download on a remote computer varies from one system to another, it generally goes like this: First, select the files you want to download, by marking them or typing their names when prompted. If the remote system does not allow you to mark or tag files, go to the **Download** command on the remote system, select a batch transfer protocol (if you haven't selected one already), then type the names of the files you want to download.

When your list of files is complete, you are ready to signal the remote computer to begin sending the files. Follow the instructions on the screen carefully.

Batch protocols can, of course, be used to transfer one file at a time. In all cases, you and the remote computer must use the same protocol, or the transfer will most likely fail.

Using the Windows file manager for batch uploads

An easy way to create a list of files for a batch upload is to use the Windows File Manager. The File Manager allows you to view the contents of drives and subdirectories, and when it is used with *QmodemPro for Win-*

dows, you can drag and drop files from File Manager right into your Batch Upload window.

Try it now, just for practice. Launch *QmodemPro for Windows,* and the File Manager, and select **Upload** from the tool bar on the *QmodemPro for Windows* terminal screen.

Move your mouse pointer to the File Manager window, and select a file by pointing and clicking. Hold down the left mouse button while you drag the file to *QmodemPro for Windows*'s Upload window, then release the mouse button. Refer to your Windows User's Guide for ways to mark and drag multiple files from the File Manager. You may never have to type a file name again!

Note that the files in the *QmodemPro for Windows* file list are sorted alphabetically, and also note that you can't add the same file more than once to the upload list.

Transfer protocols

A number of file transfer protocols have been developed for personal computers, and *QmodemPro for Windows* incorporates some of the most popular, efficient, and reliable protocols.

Each transfer protocol is to some extent configurable, and a Setup option is provided for each one. Detailed information about protocol setup is provided in Chapter 6 of this manual.

ASCII

The ASCII protocol is used primarily for on-line text transfers. It does not support transferring binary data such as programs or compressed files.

ASCII does not perform any error-checking, which makes it very sensitive to line noise. Bursts of phone line interference will introduce stray characters which are not part of the data being transmitted. For this reason, ASCII transfers are not recommended unless they are used for specific purposes where that protocol is needed.

It is advisable to use some type of flow control with ASCII transfers. Failure to do so may cause loss of data. Hardware **CTS/RTS flow control** is recommended.

Xmodem/Xmodem CRC/Xmodem-1K

There are three members of the Xmodem family of protocols in current use.

The original Xmodem uses a Checksum method to compare the received data with the transmitted data. Checksum is a very simple error-detection method with an accuracy rate of 99.6%.

Xmodem Checksum transmits 128-byte data blocks, and should only be used if the remote system offers no other choices.

Xmodem CRC (Cyclic Redundancy Checking) is similar to Xmodem-Checksum, including the 128-byte block size, but uses a far more reliable error-detecting algorithm (99.9969%). Like Xmodem Checksum, this is a relatively inefficient protocol, and should be used only if other options are not available.

Xmodem-1K is a modified version of Xmodem CRC, which uses 1024 byte blocks, as opposed to Xmodem's 128 byte blocks. You will sometimes see this protocol incorrectly labeled "Ymodem", with the true Ymodem protocol labeled "Ymodem Batch". This protocol is more efficient than the 128-byte versions of Xmodem, and is a good choice if true Ymodem and Zmodem are not offered on the remote system.

All three Xmodem protocols transmit only the contents of the file — to receive (download) a file using one of these protocols, you must specify the name of the file both on the remote system, and on the local PC.

Ymodem

This protocol supports the transfer of multiple files within a single session which does not require user intervention.

Ymodem and Ymodem/G batch protocols include header records in the downloaded data. These records contain file information such as name, size, and date/time stamps, although you can control the date and time

stamping of files from the **Options/Protocols** dialog box. As a result, file names need be specified only on the remote system before starting batch downloads.

Xmodem-1k/G & Ymodem/G

These two protocols are identical to their non-/G counterparts, with the exception that they do not perform any error correction, relying instead on the error-correction features of the modems. Modems equipped with internal error correction schemes such as MNP, ARQ, and LAP-M ensure error-free communications.

Xmodem-1K/G and Ymodem/G cannot re-send bad data blocks. In theory, there should be NO bad blocks of data in an error-free connection. In most cases, errors are caused by improper setup either in the hardware or in *QmodemPro for Windows*.

The /G protocols should not be used unless:

- Your modem is capable of hardware error correction, such as MNP, ARQ or LAP-M
- CTS/RTS flow control is turned **on** in the modem configuration.

Zmodem

This is the popular streaming protocol placed in the public domain by Telenet. Zmodem uses a variable sized block to transfer data over even the noisiest phone lines. Zmodem was designed as a Batch transfer protocol, and is able to send multiple files during a single session without operator intervention.

If an error is detected during a file transfer, Zmodem can tell the sending computer exactly where to restart the transmission. The real bonus to Zmodem is that it does not require a high-speed or error-correcting modem with MNP or V.42 to be effective. While it is not quite as fast as Ymodem/G or Xmodem-1K/G, it performs well enough to have become a standard in the industry.

One of the benefits of Zmodem is Crash Recovery. This allows an aborted file transfer to be restarted at a later time, without having to re-transmit the already received portion of the file.

It does not matter what protocol you used to begin the aborted transfer — Zmodem will resume the transfer by comparing the partial file on disk with the new file being transmitted. If the two files are the same, Zmodem re-starts the transfer where it left off. If the two files are different, Zmodem re-starts the transfer from the beginning.

Kermit

This protocol's main claim is not speed, but rather its ability to communicate with many types of computers, from mainframes to microcomputers. It can cope with systems limited to seven-bit characters even when the data to be transmitted is in eight-bit form. All characters to be sent are translated into standard printable characters and reconstructed on the receiving end.

While not terribly efficient, Kermit is sometimes an absolute necessity for data transfers involving different types of systems and terminal types. It is not normally recommended for PC to PC transfers because it is much slower than other protocols.

CIS B+

CIS B+ is a high-efficiency error correcting transfer protocol available on CompuServe. It uses the very reliable Cyclical Redundancy Check (CRC) mode of error correction for binary and text file transfers. This protocol is also able to resume an aborted download, sending only the number of bytes necessary to complete the file transfer.

CIS B+ transfers are controlled by the host — you will be asked to enter the complete path and filename for the file on your system before the transfer begins. This applies to both uploads and downloads.

Auto-start protocols

Some file transfer protocols, for instance Zmodem and CIS B+, are able to start receiving automatically without requiring you to start the download in

QmodemPro for Windows. Other protocols such as Ymodem require you to begin receiving by selecting the **File/Download** menu command or clicking the **Download** button on the Tool Bar.

Throughput and Efficiency

The throughput and efficiency figures reported by *QmodemPro for Windows* during a file transfer depend on several variables: the connect speed in bits per second, the efficiency of the file transfer protocol, the effectiveness of any data compression and error correction features in the modem hardware, and the number of retransmissions due to block errors.

For example, the typical throughput for a file compressed with PKZIP, and transmitted over clean phone lines using Zmodem would average out at about 230 CPS for a 2400 baud connection, 1000 to 1100 CPS for a 9600 baud connection, and 1500 to 1600 CPS for a 14,400 baud connection.

If your throughput values are lower than these on a consistent basis, this would indicate problems with the setup of your computer, modem or software, or a combination of problems. Another common problem causing low throughput is noisy telephone lines.

Efficiency may actually *exceed* 100 per cent on files which benefit from hardware compression and error correction performed by your modem, and may fall below 50 percent on inefficient protocols with high overhead, such as Xmodem and Kermit.

The accuracy of this figure depends on proper configuration of your modem to report the proper **connect** or DCE speed, as opposed to the **port** or DTE speed. If the true connect speed is reported, the efficiency figure would normally be in the range of 90 percent or higher for a compressed file transmitted using Zmodem.

See the appendix section on *Troubleshooting* for a more detailed discussion of slow file transfers, and possible solutions.

Canceling a Transfer

You can cancel (abort) a file transfer by clicking the **Cancel** button on the Upload or Download Status Dialog Box.

Canceled uploads are handled smoothly — the host system will recognize within a few seconds that the transfer has failed, and you be back where you were before you began the upload.

If you cancel a download, the host system may not immediately recognize the transfer failure, and may continue to send binary text to the screen. Hold down the CTRL key and tap the X key several times to signal the host to cancel the transfer and return to the normal prompt.

How do I send a file to my buddy?

It's really quite easy to send files back and forth between computers. You'll need to arrange beforehand which computer will do the calling and which will do the answering. Both computers need to be running communication software —you, of course, will be running *QmodemPro for Windows*.

And you'll both need to agree on what **Transfer Protocol** you're going to use for the session. We recommend **Zmodem**, if your friend's communication software offers this protocol, if not, then Ymodem (batch) or Xmodem-1K would be good choices. Just be sure both of you are using the same transfer protocol.

Your friend's communication software must be capable of going into **Terminal Mode**. In other words, it must allow the user to type commands to the modem, and see the modem's response. Any version of *Qmodem* or *QmodemPro* will work just fine, and many other communication programs will do the job also.

For the purposes of this example, we'll assume you are going to be dialing your friend's computer. Simply reverse the procedures below to answer a call or receive a file.

Dialing

Dial your friend's computer after arranging with him to load his communication software and go into Terminal Mode. You can dial either by creating a phonebook entry and dialing from there, or you can use the **Phone/Manual Dial** function.

Answering the phone

Your friend's modem will detect the incoming RING signal, and display the word RING on screen. The modem may or may not answer the call itself, depending on whether it is in Auto Answer mode. If it doesn't answer, ask your friend to type

ATA ENTER

at the terminal screen. This command simply tells your friend's modem to answer, and negotiate a connection with your modem.

Both modems will beep and squawk as they **handshake** and establish a connection. When both modems have responded with something like

```
CONNECT 19200/REL
```

or

```
CONNECT 2400
```

or whatever speed and error correction features they have in common, you're ready to begin sending the file.

How to send the file

If you're sending a file to your friend's computer, start the upload by clicking the **Upload** button on the tool bar. Select the protocol, then select the file or files you are going to send. When you are satisfied with your selection, click the **Send List** button.

The **Upload File Selection** dialog box is explained in more detail in the preceding section on **Uploading and Downloading Files.**

How to signal your friend's computer to receive the file

If you are both using Zmodem, in most cases the file transfer will start automatically on your friend's computer. If it doesn't, your friend will need to start a **download**, or **receive** the file. In most DOS communication programs, the PG DN key or ALT R will start a download. When your friend has selected the appropriate transfer protocol and confirmed his selection, the file transfer will begin.

How to disconnect

Use the **Terminal/Hangup** button when you have finished sending files. That's all there is to it!

Viewing a file

QmodemPro for Windows allows you to view text and graphics files on your disk in a pop up window. The text files you might want to view include the capture file, log file, scripts, and note files.

Text files (binary files too)

QmodemPro for Windows has a simple file viewer, launched from the **File/View a File** menu command, which allows you to look at text or binary files. From the viewer menu, you can search for text within the current file, and you can mark blocks of text and copy them to the clipboard to paste into other screens or applications. You have the option to view files in text mode or in hexadecimal mode — this may be useful when you are looking at the contents of a binary file.

To open another file from the File Viewer, select the **File/Open** menu, or drag a file icon from the Windows File Manager into the File Viewer window.

Graphic files

Many Bulletin Board Systems and on-line services have file sections devoted to graphic files. These files contain digitized reproductions of drawings, photographs, or even computer art.

Many computer users enjoy downloading and looking at picture files. *QmodemPro for Windows* helps you do this by automatically displaying certain types of graphic files in a window on your screen as the file is being downloaded. Viewable files include .GIF (CompuServe's Graphic Interchange Format) and .BMP (Windows Bitmap).

If you want to examine a part of the picture in more detail, you can zoom in by clicking the **Zoom** button on the tool bar. Move your mouse pointer to the area you wish to enlarge, then click the left mouse button. Clicking the left mouse button enlarges the part of the image under the mouse pointer, while clicking the right mouse button shrinks the image.

You can use the GIF viewer to look at graphic files already on your disk, as well. Select the **File** menu option **View a GIF file** to pop up the viewer

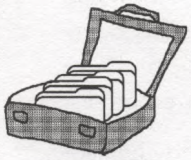
window. From there, you can select one or more GIF files to view, either one at a time, or multiple files.

To open another file or group of files from the GIF Viewer, select the **File/Open** menu, or drag one or more file icons from the Windows File Manager into the GIF Viewer window.

Part or all of an image can be copied to the clipboard for use in other applications. To grab a portion of an image, position the mouse pointer over the top left corner of the area to mark, and hold down the left mouse button as you drag it to the bottom right corner. Select **Copy** from the tool bar or edit menu to put the selected image on the Windows clipboard. Select **Copy** without marking an area to grab the entire image.

You can also delete a picture file you don't want to keep, by using the **Delete** command on the File menu.

What to do with compressed files



Most on-line services and Bulletin Board Systems compress program and document files in their library to save space on disk and reduce transfer time. These file compression programs analyze the contents of a file, and replace repetitive patterns of characters with simpler patterns, thus making the file smaller. Another function of file compression is to create an envelope containing more than one file inside it.

Since most programs or applications actually consist of several files, this is the most reliable way to ensure that when you download a program or application, you get the complete program, on-line documentation, manuals, information files, and so on.

But before you can actually install and run the program, you will need to un-compress the file. That means you'll need a copy of the same program used to create the compressed file in the first place. Most of these compression programs are shareware or freeware, and can be downloaded from your favorite local BBS or on-line service.

One of the most popular file compression utilities is PKZIP from PKWARE. You can always download the latest version (currently PKZ204G.EXE), from MSI HQ BBS and most local Bulletin Board Systems. To use this file, copy it to a directory in your DOS path, and run it in that directory by typing

```
PKZ204G ENTER
```

This file is a self-extracting archive containing the program, utility, and documentation files you need to use PKZIP and PKUNZIP. Most other compression utilities work in the same way.

If you need help understanding the use of DOS commands such as COPY and PATH, refer to your DOS manual.

Quick Learning Scripts

The **QuickLearn** Script Recorder allows *QmodemPro for Windows* to learn how to log onto a BBS or Online Service for you. It does this by recording your response to data that comes from the host system, and writing the incoming data and your responses as a simple script, or program.

The script language itself is very much like Basic, so those already familiar with this language will find scripting easy. For those users interested in learning more about the script language so they can write their own scripts and perform more complex tasks, we encourage you to review the **SLIQ Script Language Reference** in Volume 2 of this documentation.

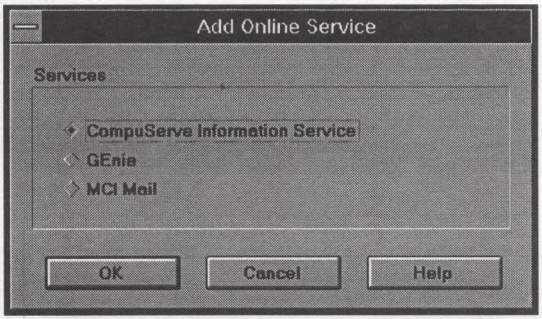
There are two ways to begin QuickLearning a script. The first is to go to the **Scripts** menu and select **QuickLearn.** The second way is to go to the Phonebook, and **Revise** the entry you want to dial. Enter a filename in the Scripts field in the Phonebook entry. The next time you dial this entry, *QmodemPro for Windows* will automatically record a script file.

Many QuickLearn scripts are ready to run without further editing or modification. The details of writing and editing scripts are beyond the scope of this portion of the manual, however. If your newly-learned script requires editing or debugging, please review Volume 2 of this documentation for assistance.

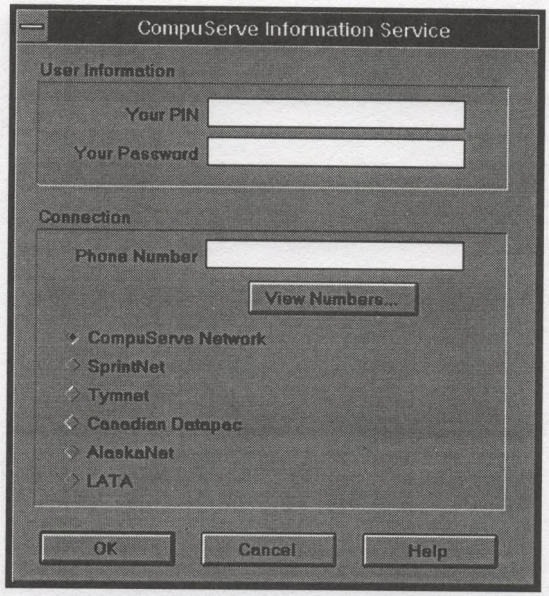
Using the SERVICES.SCR to log on to online services

A special script provided with *QmodemPro for Windows* automatically creates phonebook entries with logon scripts for a number of online services including CompuServe, MCI Mail and GEnie. To use this script, sego to the *QmodemPro for Windows* Terminal window and select **Scripts** from the menu bar.

Select **Execute a script**, and in the directory dialog box that pops up, select SERVICES.SCR. *QmodemPro for Windows* will compile the script automatically, and put a dialog box on the screen:



Select the service you would like to add, and fill in the fields in the next dialog box. We will use CompuServe as an example — the others are similar in layout.



Enter your CompuServe User ID or "PIN", your password, and your local CompuServe phone number, if you know it. You can look it up by selecting the **View Numbers** button and searching for your city.

When you have finished filling in the information on the screen, select **OK**. *QmodemPro for Windows* will create a phonebook entry for you automatically, with an auto-executing script that will log you into your online service.

Opening a DOS Window

QmodemPro for Windows allows you to open a DOS window right from the File menu. Select **File** and then select **Shell to DOS**. *QmodemPro for Windows* will execute the Windows command DOSPRMT.PIF and open a DOS window for you. This is a handy way to copy or move a file, check free space on your drive, or even just type a few DOS commands for old time's sake.

Sending and Receiving Fax Messages

QmodemPro for Windows is able to send and receive Fax messages if your modem hardware supports CLASS1 or CLASS2 Fax.

Quick Fax

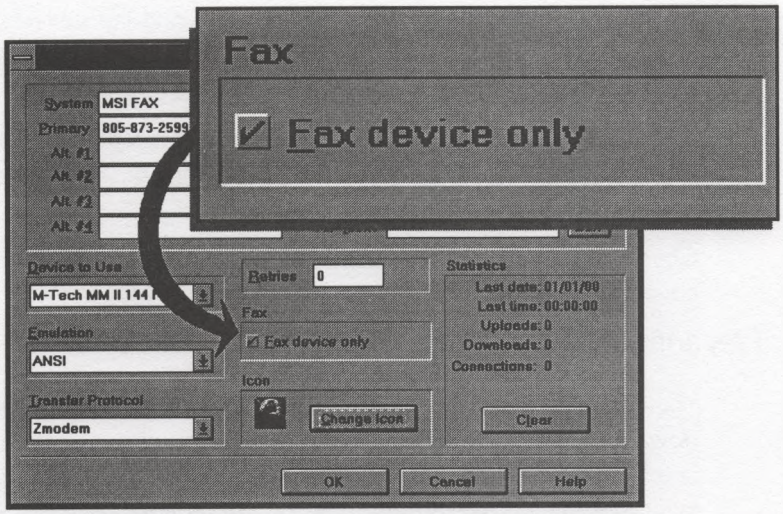
You can send a fax quickly using the **Fax/Send Fax** menu command. A dialog box will pop up asking you for the Fax number to dial, and information such as the sender and recipients' names for the cover sheet, and the name of the document to send. When you finish entering the information, click the **OK** button, and *QmodemPro for Windows* will begin dialing the Fax number you supplied.

QmodemPro for Windows will then convert the characters and graphics in the file to a format which can be sent as data over a modem connection and translated into a graphical representation of your original document on the receiver's Fax machine. This process is called *rasterizing*.

When your modem successfully connects with the Fax machine at the remote end, it will display a dialog box showing the connection speed and the progress of the Fax transmission. When the Fax is finished sending, *QmodemPro for Windows* will disconnect automatically.

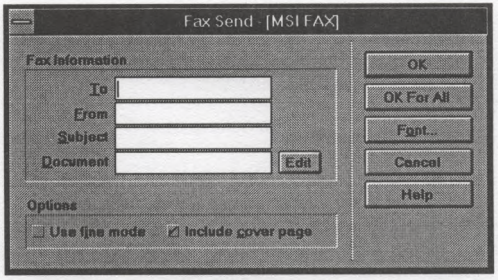
Sending a Fax from the Phonebook

If you want send Fax messages to the same phone number on a regular basis, it's a good idea to put that information in the Phonebook. Create a phonebook entry for the Fax machine you wish to call. The entry should look something like the following illustration.



Note particularly the **Fax Options** section in the middle of the screen. The **Fax Device Only** selection must be toggled **on**, so that *QmodemPro for Windows* knows to enable the Fax portion of your modem for this call. This is the case even if you are calling another Fax modem.

When you dial a phonebook entry tagged **Fax**, *QmodemPro for Windows* will pop up a dialog box asking for the name of the document to send. The document must consist of plain ASCII text, or it may be a PCX graphics file or a BMP Windows Bitmap file.



Fill in the names of the sender and recipient, and the subject of the message. The To, From and Subject fields are automatically imported into the cover sheet.

The option box for **Fine Mode** sends the Fax at a higher resolution, allowing a sharper image to be transmitted, but this increases the time it takes to send the document.

Check the option box for **Include Cover Page** if you want to send a cover sheet with your Fax.

Preparing a custom cover sheet

You can use the sample cover sheet provided with *QmodemPro for Windows*, or you can create your own using an ASCII text editor (such as the one built into *QmodemPro for Windows)*. The name and path of your custom cover sheet is entered and stored in the **Options/Fax** dialog box.

Here is an example of a custom cover sheet using **Fax Variables** to fill in system information.

```
Date:       @DATE@              @TIME@
From:       @FROMSYSTEM@
            @FROM@
            @FROMPHONE@
  To:       @TOSYSTEM@
            @TO@                @TOPHONE@
Subj:       @SUBJECT@

Total @PAGES@ Page(s) (including this header)
```

Here is a complete list of Fax Variables:

Macro	Operation
@TOSYSTEM@	The name of the Fax system, from the phonebook.
@TO@	From the To: field in the Fax Send dialog box.
@TOPHONE@	Number of the Fax system, from the phonebook
@FROMSYSTEM@	Name of the Fax system, from the dialog box in **Options/Fax** in your Fax config setting

Macro	Operation
@FROM@	From the From: field in the Fax Send dialog box.
@FROMPHONE@	Phone number of the Fax system, from the **Options/Fax** dialog box.
@SUBJECT@	From the Subject: field in the **Fax Send** dialog box.
@PAGES@	Total pages in the Fax including the cover page, calculated automatically by *QmodemPro for Windows*.
@DATE@	The current date, from your PC's internal clock.
@TIME@	The current time, from your PC's internal clock.

Text files and pictures (in PCX or BMP format) can be imported into the cover sheet using a redirection macro. The format is

```
<<FILENAME.TXT
```

or

```
<<FILENAME.PCX
<<FILENAME.BMP
```

Small PCX and BMP files can also be enlarged using the magnify switch by adding /2 or /3 to the end of the filename. The /2 switch doubles the image size and /3 triples the image size.

```
<<FILENAME.PCX /2

<<FILENAME.BMP /3
```

These import commands must begin in column 1 of the screen, and there should be no additional text on the line.

You can force a page break in a text file you want to fax FAX by using the "formfeed" character (ASCII 12), or place the command

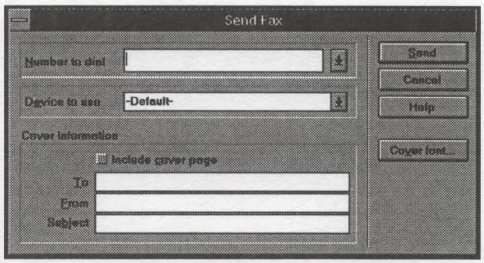
```
.PG
```

on a line by itself.

Sending a Fax from another Windows application

You can fax a document from another Windows application with the **Print** command (usually found on the application's **File** menu. Select **Printer Setup** to select **QWFax on COM1:** as the target printer.

When you select **Print**, QmodemPro's **Send fax** dialog box will pop up. Fill in the number to dial, select the Device to use, and fill in the cover information. Use the **Cover font** to select a font of your choice for the cover sheet.



QmodemPro will dial the fax number you entered, and will send the current document as a fax.

Receiving a Fax

There are two ways to receive Faxes: manually, and automatically. To receive Faxes automatically, your current device must be configured for Fax. Go to the **Fax** menu on the Terminal window, and select **Auto-Receive**. Then whenever your phone rings, the modem will answer, negotiate a Fax connection, and receive the Fax.

You may only want to receive Faxes by arrangement with the person sending the Fax, rather than from anyone at any time. The **Fax/Receive** menu command will answer the phone, receive the incoming Fax, and then exit back to the Terminal window.

In both cases, incoming Faxes are stored as files on your disk. The files are placed in your **Fax Receive Path**, which you specify from the **Options/Fax** menu. To see a list of received Faxes, go to the **Fax** menu and select **Receive Log**. This dialog box lists each Fax, the date and time it was received, the number of pages received, and the sender's ID (usually the phone number).

Select Faxes to view or print by clicking the left mouse button over a file in this list.

Viewing a Fax

The Fax viewer can display your Faxes in a number of ways. The default mode is to show each page full size on your screen. You can reduce the image to 25% or 50% of its original size, or enlarge it to full size, or display a thumbnail image of each page of a multi-part Fax message. You can even copy the current page to the Windows Clipboard to paste into another application. Each of these commands has a corresponding button on the Tool Bar.

Printing a Fax

You can print a Fax either from the Fax viewer, or directly from the **Receive Log** or **Auto-Receive** dialog boxes. Select the **File/Print** command from the Fax viewer, or the **Print** button from the Receive Log.

The Print command uses the **Print Dialog Box**. It allows you to define resolution, a range of pages to print, and whether to print multiple copies of the document. A **Setup** button pops up a dialog box with setup information for your currently selected printer. From there, you can select a different printer, or change the printer's internal settings to print the file the way you want.

Devices

A Device is simply a set of modem configuration instructions for a particular modem, attached to a particular port on your PC. You may define more than one device for a single modem, and you may define one or more devices for multiple modems on your PC.

Rather than having to specify all the necessary communication parameters manually, or separately for each Phonebook entry, these parameters are associated with a Device. Devices are then associated with Phonebook entries.

Anyone who has ever bought a new modem, or moved their modem to different serial port, and had to re-enter all that configuration information into all their phonebook entries, will appreciate this modular approach. Simply change the necessary parameters associated with a device (from the **Options** menu, select **Device** and edit your settings), save your changes, and the work is done!

Pre-defined devices

QmodemPro for Windows has two predefined devices. The first of these is **-Default-**. If you select this as the **Device to use** when you add or revise a Phonebook entry, you can easily copy your Phonebook to another computer, or use a different modem, without reconfiguring your phonebook entries.

The second is **-Current Device-**. This uses whatever device is currently selected from the **Device/Select** menu.

Cloning a device

In some cases, the settings in the default device aren't right for a particular host system. For instance, if most of your calling is to Bulletin Board Systems, you've probably set your default device to 8 data bits, no parity and 1 stop bit. If you want to call a mainframe computer or an on-line service, you will probably need to use 7 data bits, even parity and 1 stop bit.

The simplest way to do this is to create a copy of your default device with these special settings. Go to the **Options** menu, select **Device**, and select your default device from the list. Click on the **Duplicate** button to create a copy of the device.

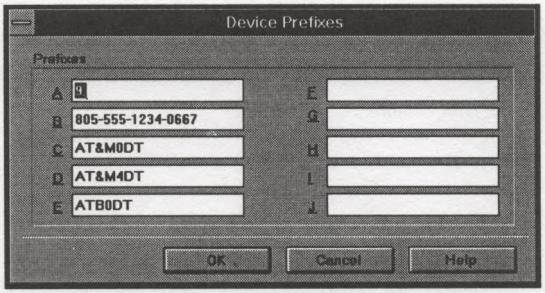
Give the device a new name which describes its purpose (for instance 19200 7E1). Then select the **Hardware** button and select your new parameters. In this case, we'll be changing the parity to Even and data bits to 7. Save your settings by clicking the **OK** button, and return to the Phonebook by clicking the **Close** button .

Now, it's a simple procedure to select and revise your phonebook entries and attach the newly-cloned device to those entries which use 7-E-1 instead of the default 8-N-1.

Alternate Dialing Prefixes

QmodemPro for Windows allows up to 10 Prefix codes per device, assigned to the letters A through J. Each prefix code can store up to 30 characters. To edit dialing prefixes, go to the **Options** menu, select **Device**, and select the device you want to edit from the list. Click on the **Prefixes** button to edit the dialing prefixes.

Following is an example of the Edit Prefixes dialog box:



You can use these prefixes to send long distance access code numbers, PBX codes, extension numbers, and more. Note that these prefixes can be

placed anywhere in the phone number. For instance, if you dial 9 from your PBX to get an outgoing phone line, you may wish to add "9," (dial 9, then wait two seconds) to your list of prefixes.

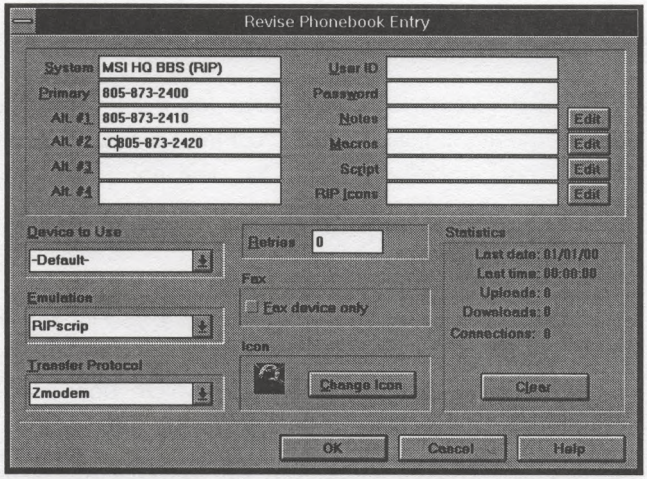
If you need to enter a phone credit card number after dialing a number, you can store that card number as a prefix (although in this case it is actually used as a suffix), then append the prefix letter to the phone number, to save having to type the card number into every phonebook entry.

Do *not* define a phone number using its alpha representation. A number such as "1800DECDEMO" may be a valid telephone number, but the dialer will substitute the prefix values of letters A through J in any phone number.

Special control characters may also be entered in these boxes, if necessary. See the discussion in Chapter 5 on **Special Control Characters** for more information on how to enter control code sequences in macros, modem command strings, and scripts.

You will notice in the previous illustration that the Prefix codes C, D, and E, appear to be modem dialing commands. These commands can be used to override the default dial command for the device specified for a phonebook entry.

To use these alternate dialing commands, precede the desired prefix in the phone number entry field with the special character ` (reverse apostrophe or single open quote). When *QmodemPro for Windows* detects that special character it will use the prefix code immediately following instead of the default dialing command.



The example above assumes a modem with an MNP error-correction mode that is enabled with the AT&M4 command, and is disabled with the AT&M0 command. The DT "Dial Tone" command tells the modem to tone-dial the number that follows.

In the example above, the primary number and alternate numbers 1 and 2 will be dialed with an AT&M4DT command, which enables MNP error-correction and dials the Mustang Software HQ BBS (which operates a few HST modems). Alternate #3 will be dialed with an AT&M0DT command, which disables MNP error-correction and dials 1-805-873-2403

If you use the reverse apostrophe modifier to enable or disable one or more of your modem's features, be sure to set the default dialing prefix to the one you use most often. By doing this, you only need to override entries that do not conform to the default mode. In the previous example, your default dialing prefix should be "AT&M4DT". Prefix `D would be used to dial non-MNP systems.

Fine tuning

The default settings for *QmodemPro for Windows* are designed to accommodate the majority of users, but most areas of the program are completely configurable, including the terminal parameters, device, and desktop.

Why change the default settings?

Because some systems you call may have special requirements not provided for in the default settings. You may, for instance, be calling a mainframe computer or on-line service which does not support 8 bit connections.

Or, you may be required to use a special Terminal Emulation to run applications on another computer, with specially redefined function key commands and display attributes.

Finally, you may, for your own convenience, want to assign certain frequently-used commands or text to a macro key, for instant recall.

How do I know if I need to make changes?

The following paragraphs explain the meaning of each of the parameters you can change in the Terminal Window, along with examples showing why you might need to change these parameters.

Changing port settings

The **Device/Fine Tune** menu allows you to make changes on the fly when necessary, and overrides the current device settings.

Baud rate

The terms "Baud" and "Bits per Second" are used interchangeably, though this is not necessarily accurate usage. Baud is short for "Baudot", a term which describes the number of discrete signal events per second occurring on a communications channel.

Each signal event generally transmits one Bit of information. Most higher speed modem definition standards allow for more bits to be transmitted for each signal event, which means that **Baud** and **Bits Per Second** are not always the same.

In all cases within *QmodemPro for Windows*, the Speed refers to Bits per Second, abbreviated as "BPS". For instance, your modem may be capable of 2400 BPS, or 14,400 BPS, or 9600 BPS.

The baud rate is the speed at which the COM port operates and should in most cases match the top speed of the device, or the locked DTE speed for high speed modems. If DTE is not locked, *QmodemPro for Windows* will automatically adjust to a lower speed upon connection, if necessary. Supported values are 110, 300, 1200, 2400, 4800. 9600, 19200, 38400, 57600, 115200 and 230400, although unless you install high performance communication drivers to replace the Windows communication drivers, we recommend setting the Baud Rate no higher than 19200.

High speed modems, that is, modems with nominal baud rates of 9600, 14400, 16800 and higher, should always be set to a higher baud rate than the actual connect speed, to enable hardware flow control, data compression and error correction. Thus, the correct setting for a 9600 or 14,400 baud modem would be 19200 or higher.

Parity

Parity is used to insure the validity of the data being transmitted and received. The Parity is calculated by performing a simple arithmetical computation on the bits received, and comparing the result with the Parity Bit sent with each group of Data Bits. Parity values are None, Odd, Even, Mark and Space.

Most Bulletin Board Systems use None (no parity), and both systems must match. A parity mismatch will cause your screens to appear garbled.

Stop Bits

Stop bits are generated by the serial port chip or UART (Universal Asynchronous Receiver Transmitter) to isolate transmitted characters. In other

words, since each character is composed of a number of bits (usually 7 or 8) transmitted one at a time, the programs need stop bits to tell the sending and receiving computers where each character begins and ends in the data stream.

Data bits

Characters transmitted over phone lines are made up of **data bits**. Most PC-based Bulletin Board Systems use 8 data bits, while some mainframe and minicomputer systems use 7 data bits. Both systems must match — if one side is expecting 8 data bits and the other side is expecting 7, your screens will be garbled.

Other Device Settings

Break signal

"BREAK" is a special signal generated by the serial port, used to signal the remote computer to have it handle some special condition. In most cases, **BREAK** is used to tell the other computer to interrupt whatever it is doing. Most PCs do not recognize the **BREAK** signal, although a few older mini and mainframe systems still do.

As is the case with PC programs which ignore or disable the CTRL BREAK, the BREAK signal may not be recognized by the receiving computer. BREAK handling is a function of the communication software on the remote system, and this feature may not be implemented on the computer you are communicating with.

Flow Control

A real-life example of flow control might be a conversation on a CB Radio channel, where each party indicates he has finished speaking by saying "Over". In this way, the message comes through without interference.

Communication devices must also signal each other when they are ready to send and receive data, so that both systems remain synchronized and no data is lost.

XON/XOFF are software controlled transmit/receive signals which control the flow of text or data. While **XON/XOFF Flow Control** is active, CTRL S will stop the flow of data and CTRL Q will restart it. Note that software flow control is not used by most communication software.

XON/XOFF is generally used to control text viewed on the screen or to prevent a data buffer overflow, and is controlled in **Device/XonXoff** and **Options/Device/Hardware**.

Full/Half Duplex

Duplex describes the method used to echo your keystrokes back to your terminal screen. In **Full Duplex** mode, the remote system echoes (displays) your keystrokes back to you. In **Half Duplex** mode, the remote computer does not echo your keystrokes, so *QmodemPro for Windows* must do it instead.

An incorrect Duplex setting will yield one of two results: either you will NOT see any keystrokes displayed on your screen as you type, or your keystrokes will be duplicated, like this:

```
HHEELLLLOO
```

In the first case, you are operating in FULL duplex mode, and you should switch to HALF. In the second case, you are operating in HALF duplex mode and you should switch to FULL.

Just to make this more interesting, most Hayes-compatible modems also feature an internal Echo setting. If the modem's echo is set to **on**, the modem itself will echo your keystrokes back while in command mode. If your *QmodemPro for Windows* settings are correct, but your keystrokes are still duplicated, the modem is likely to be the culprit. Check your modem manual for switch settings or initialization parameters to turn the local echo **off**.

Changing terminal settings

Doorway mode

Doorway mode is a special emulation that allows your PC to send keyboard scan codes such as function keys and cursor movements to the host system, rather than having those keys interpreted as commands in the Terminal window. To operate properly, the host system (the system you are calling) must have support for the doorway emulation as well.

This allows you to use the full screen editing keys in many Bulletin Board System message editors, and to run certain programs by remote control.

Carriage Return/Line Feed handling

Different kinds of computers use different methods for indicating the end of a line of text. On IBM compatible PCs, two end-of-line characters are required: the carriage return (13 decimal) and the line feed (10 decimal). Some other kinds of computers, for instance some mini and mainframe systems and the Apple Macintosh, use only a carriage return with no line feed character.

The result, if line feeds are not being sent, is that text on your screen will be overwritten. By turning **on** the **Add LF to CR** toggle, *QmodemPro for Windows* will automatically add a linefeed character when it receives a carriage return.

The **Options/Emulations** menu offers additional line feed selections based on the selected terminal emulation, and the **Options/Protocols/ASCII Options** dialog box allows total customization of carriage return and line feed handling during ASCII data transfers.

8th Bit Strip

Computers ordinarily use one byte, or 8 bits to display a single character on the screen. IBM compatible PCs use all 8 bits to indicate a single character, while many mainframe systems use only 7 bits for a character. The 8th bit is also called the "high bit".

PC compatibles use the 8th bit to add another 128 characters to the ASCII character set. These characters are called "high ASCII" or "IBM ASCII" characters, and are used to provide accented characters, mathematical symbols, and line and box drawing characters.

Mainframe computers, on the other hand, generally only use the first 7 bits, and either ignore the 8th bit, or use it for some other purpose, such as parity checking. This may cause your screen to appear cluttered with foreign language or graphic characters. Turn **on** the **8th bit strip** in this case, to display normal ASCII characters.

Emulations

The **Terminal/Emulation** feature allows *QmodemPro for Windows* to behave like a terminal other than a standard PC display, such as the popular VT100 from Digital Equipment Corp. While in terminal emulation mode, *QmodemPro for Windows* interprets keyboard and video information so that is displayed properly on the PC screen, as if it were a native terminal of the selected type.

QmodemPro for Windows supports more than 30 different types of emulations. For most purposes, you should be using ANSI, unless you are sure another emulation is required. Use Vidtext or ANSI when you call CompuServe.

Another emulation you may find useful on Bulletin Board Systems that support it is RIPscrip. This is a graphical emulation with full mouse support. RIPscrip is available in most quality BBS software programs, and when properly configured, it allows users to select menu options with the mouse, and see full-screen graphics.

If you are connecting with a mainframe computer, you may need to select some other terminal emulation. Your system administrator or PC Support personnel can advise you on the recommended terminal emulation for the mini or mainframe system you will be calling.

Please refer to the Online Help topic **Terminal Emulations** for information on keyboard mapping and other technical aspects of each emulation.

The following emulations are supported by *QmodemPro for Windows:* ADDS VP60, ADM3A, ANSI, Avatar, Debug ASCII, Debug Hex, DG 100, DG 200, DG 210, Hazeltine 1500, Heath 19, IBM 3101, IBM 3270, RIPscrip, TTY, TVI 910, TVI 912, TVI 922, TVI 925, TVI 950, TVI 955, Vidtex, VT 52, VT 100, VT 102, VT 220, VT 320, Wyse 30, Wyse 50, Wyse 60, Wyse 75, Wyse 85, Wyse 100, and Wyse 185

Customizing the desktop

Here, we'll show you some of the changes you can make using the **Options/Desktop** menu choice..

Patterns and Colors

The desktop pattern is a simple repeating geometric pattern made of black and white squares. You can select from a number of different patterns in the list box at the top corner of this dialog box by clicking on the arrow at the right side of the box.

Select **None** if you don't want to have a background pattern, or select one of the patterns in the list, if you prefer.

The **Colors** option allows you to change the colors that make up the pattern. Use the list boxes to select foreground and background colors.

Wallpaper

The **Wallpaper** option allows you to select a Windows .BMP file to display on the Desktop. The bitmap image is displayed on the desktop surrounding the terminal screen. For a repetitive pattern made up of a small bitmap, select **Tile.** To center a larger bitmap on your desktop, select **Center.** If wallpaper is used, the selection of patterns and colors may be covered in part or entirely by the wallpaper.

Customizing Sounds

If you have a sound card in your PC, *QmodemPro for Windows* can use it to play WAV files to signify system events such as a successful connection, the completion of a file transfer, and more.

Go to the **Options** menu and select **Sounds** to make changes. A dialog box will pop up showing a list of sound events you can modify. Highlight the entry you want to edit, and click the **Change** button. A standard Windows Common Dialog Box will pop up showing a list of WAV files in the left window, and options to search different drives and directories in the right window.

A **Test** button allows you to listen to the selected WAV file before committing yourself to each selection. The **Clear** button resets the sound for the selected event to "NONE"

Using a network modem

QmodemPro for Windows can also be used on modems connected to your Local Area Network. In some cases this may require special software drivers on both the network and/or your workstation. This allows you to use modems on the LAN as if they were connected to your own PC.

Since each network installation is different, a discussion of specific network modem drivers and operational parameters is beyond the scope of this manual. At least one shareware product is available that claims to support NACS/NCSI/Int14h network modems — NMP2.EXE, available for download from the MSI HQ BBS is one network modem driver product reported to work well with *QmodemPro for Windows*.

If you are on a Local Area Network, and would like to use *QmodemPro for Windows* on a network modem, ask your Network Administrator for information on what drivers are required, and how to install them on your PC.

4 -Advanced Operation

Dost thou love Life? Then do not squander Time;
for that's the stuff Life is made of.

Benjamin Franklin

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Command line options

You can start *QmodemPro for Windows* with command line options that specify phonebook files to load, entries to dial, and scripts to execute. In this way, you can create an icon for your *QmodemPro for Windows* program group that automatically executes the Host script, for instance, or dials a list of phonebook entries, or loads a different phonebook file.

Any scripts attached to individual phonebook entries will execute as *QmodemPro for Windows* connects successfully with each entry.

Dialing a single Phonebook entry

The simplest command line switch simply starts up *QmodemPro for Windows*, specifies the phonebook file to load, and dials a specific entry. Entries are specified by number. For example, to dial entry number 4 in the default Phonebook file, the command line looks like this:

```
QMWIN QMWIN.PHN 4
```

Loading a different Phonebook file

The default Phonebook file is called QMWIN.PHN, and this phonebook is loaded automatically when you start *QmodemPro for Windows*, unless you specify otherwise.

If you have created other Phonebook files, you can load one of these in place of the default QMWIN.PHN from the command line.

Say you have a phonebook file named LOCAL.PHN containing only local phone numbers. To start up *QmodemPro for Windows* with your LOCAL.PHN Phonebook loaded, use a command line like this:

```
QMWIN LOCAL.PHN
```

Dialing multiple entries

There are two ways to auto-dial a group of Phonebook entries — by loading and dialing a group of entries, or by searching for text in the Phonebook, then tagging and dialing entries which contain the search text.

By Group name

Now, say you want a command line that will tag and dial every system in the group named "Cool Files". You would call your group from the command line like this:

```
QMWIN QMWIN.GRP "Cool Files"
```

This tells *QmodemPro for Windows* to load the Group file associated with the default Phonebook, then tag and dial all members of the group "Cool Files".

You can, of course, use a group file associated with a different phonebook, by typing the phonebook name with the extension .GRP in place of the default QMWIN.GRP. A command line loading the LOCAL phonebook and dialing all members of the group "Great Games" would look like this:

```
QMWIN LOCAL.GRP "Great Games"
```

For a refresher on how to create and edit Groups, refer to the Phonebook section of the previous chapter.

By Text Search

This works in the same way as the **Search** menu command in the Phonebook. Load the phonebook from the command line, together with the text you want to find, in quote marks.

For instance, if you want to dial everything in the default QMWIN.PHN Phonebook matching the text "new BBS", use a command line like this:

```
QMWIN QMWIN.PHN "new BBS"
```

As with previous examples, you can load a different phonebook in place of the default QMWIN.PHN.

Running a Script

To execute a script automatically when you start *QmodemPro for Windows*, simply specify the name of the script on the command line, like this:

```
QMWIN SCRIPT.SCR
```

or

```
QMWIN C:\QMWIN\SCRIPTS\SCRIPT.SCR
```

Note that unless a full path is included, the script file must exist in the default script directory, specified in the **Options/Files/Path Definitions** dialog box, and the extension .SCR or .SCC is required.

Please refer to Volume 2 of this documentation for more information on the *QmodemPro for Windows* script language.

Creating an Icon

The final step in automating your *QmodemPro for Windows* sessions is to create icons which start *QmodemPro for Windows* with command line switches. Here's how to do it:

From Windows, go to the **Program Manager**, and select a **Program Group**. Then click on the **File** menu, and select **New.** Then select **Program Item**, and type in the **Description** you'd like to assign to your new task.

In the text box for **Command line,** type

```
QMWIN
```

followed by the appropriate command line argument.

For **Working Directory,** type the drive and path in which your *QmodemPro for Windows* application is installed. The **Shortcut key** is optional, but allows you to execute the icon from a keystroke such as CTRL ALT Q.

Then select **Change Icon,** and type in the path and filename of the icon you'd like to assign to this task. You can use the **Browse** button to see a list of files containing Windows icons. The file BBSICONS.DLL supplied with *QmodemPro for Windows* contains several dozen BBS icons for you to use if you like. When you are satisfied with your selection, click **OK** to save your new icon.

To execute your customized *QmodemPro for Windows* startup command, simply double-click the new icon from the Program Manager.

The Editor

QmodemPro for Windows has a simple built-in text editor, suitable for writing and editing scripts, batch files and other ASCII text files.

Keyboard commands

If you have used other word processors and text editors, you will probably already be familiar with how to use the arrow keys, PG UP and PG DN keys to move the cursor around the screen. Here are some additional keyboard commands you may find useful.

CTRL N	Split line
CTRL T	Delete word right
CTRL V	Paste from clipboard
CTRL X	Cut marked text to clipboard
CTRL Y	Delete line
CTRL DEL	Delete block
SHIFT DEL	Cut to clipboard
SHIFT INS	Paste from clipboard
CTRL INS	Copy to clipboard
ALT ← (backspace)	Undo editing
SHIFT ALT ← (backspace)	Undo undo
F3	Find text
CTRL PG UP	Top of screen
CTRL PG DN	Bottom of screen
CTRL HOME	Beginning of file
CTRL END	End of file

Marking Text

Move the insertion point to the beginning of the text you want to mark using arrow keys or mouse.

To mark text using the mouse, hold down the left mouse button while you drag the mouse to the end of the text you want to mark. Marked text will show up in a contrasting color. When you have finished marking text, release the left mouse button.

To mark text using the keyboard, hold down the SHIFT key while you move the insertion point using the arrow keys to the end of the text you want to mark. When you are finished marking text, release the SHIFT key. SHIFT HOME marks everything from the current cursor position to the beginning of the line, while SHIFT END marks everything from the current cursor position to the end of the line. SHIFT CTRL HOME marks everything from the current cursor position to the beginning of the file, while SHIFT CTRL END marks everything from the current cursor position to the end of the line.

Moving Text

First, mark the text you want to move. Then cut the marked text to the clipboard using your mouse to select the menu command **Edit/Cut**. Or, press SHIFT DEL .

Then move the insertion point to the place where you would like to move the selected text. Using your mouse, select the menu command **Edit/Paste**. Or, press CTRL INS .

Copying Text

First, mark the text you want to copy. Then copy the marked text to the clipboard using your mouse to select the menu command **Edit/Copy**. Or, press SHIFT INS .

Then move the insertion point to the place where you would like to copy the selected text. Using your mouse, select the menu command **Edit/Paste**. Or, press CTRL INS .

Deleting Text

Use the ← (backspace) or DEL key when you want to delete text from the current document but you have text on the Clipboard that you want to keep.

To delete one character at a time

Press ⌫ (backspace) to delete the character to the left of the insertion point. Press DEL to delete the character to the right of the insertion point.

To delete more than one character

Select the text you want to delete. Press ⌫ (backspace) or DEL. To place the text onto the Clipboard, choose **Cut** from the **Edit** menu.

Undoing changes

You can **undo** changes, and restore your text to the way it was before you performed the most recent command, with the **Edit/Undo** command or ALT ⌫ (backspace).

You can undo multiple levels of previous commands, starting from the most recent and working backwards. The number of times undo can be used depends on the amount of information affected by the commands. Up to 8K of previous information is stored in the undo buffer.

Formatting Text

To format text, do the following.

End a line	Press ENTER.
Indent a line	Press ⇥ (tab).
Insert a tab	Press ⇥ (tab).
Insert a blank line	Move the insertion point to the beginning or end of a line, and then press ENTER.

Finding Text

You can start a search for specific text at any point in a document.

To find specific characters or words, move the insertion point to where you want the search to begin. From the **Search** menu, choose **Find**. Type the characters or words you want to find. If you want to match capitalization exactly, select the **Case Sensitive** check box.

To specify the search direction, select the **Forward** or **Backward** option. Then choose the **Find Next** button.

To find the next occurrence of the text, choose the **Find Next** button again. You can also close the Find dialog box and choose **Search Again** from the **Search** menu or select the toolbar button **Repeat**.

Changing the appearance of the terminal screen

The size of the actual terminal screen on the *QmodemPro for Windows* desktop depends on the font you have selected for the current terminal emulation, along with the number of lines and columns specified. Usually, this is 80 columns wide by 25 lines deep.

The terminal screen always uses monospaced fonts rather than proportional fonts. In other words each character in the terminal screen has the same width, like on an old typewriter — as opposed to proportional fonts used in typeset documents such as the book you are reading right now, in which characters may vary in width from a lower case "i" to a capital "W".

Thus, the boundaries of the terminal screen are indicated by a border, and the screen is centered in the *QmodemPro for Windows* desktop. You can enlarge and reduce the desktop surrounding the terminal screen by dragging a corner of the window with your mouse. As you do so, the font size changes to accommodate your new window size.

If you prefer to see only the terminal screen without the surrounding desktop, you can resize the window to the exact size of the terminal screen borders by clicking the arrow at the bottom right corner of the window. This arrow appears only when the window is *smaller* than terminal screen, and has scroll bars on the bottom and right edges of the window.

Changing the font

The size of the terminal window is governed by two things: the font selected to display the characters on the screen, and the number of rows and columns you define for your terminal window. To change the font, go to the **Options** menu, and select **Emulations.** Select the emulation you would like to edit, and click the **Font** button.

Note that only monospaced fonts will be available for selection. An example of the selected font is displayed in a window in the bottom of the dialog box. Larger fonts will enlarge the area of the terminal window on your screen.

Select the font and size you prefer, click the **OK** button, and then view the results of your changes on the terminal window. Note that by selecting **Options/Desktop/Terminal Font/Based on window** the size of the selected font can be changed by enlarging the terminal window — grab an edge and move it with the mouse to change the size.

Alternate Code Pages

QmodemPro for Windows will search your environment for a code page (alternative character set). If a code page other than the default US English is found, *QmodemPro for Windows* will search for a QMWFONT.xxx where xxx is the code page.

An alternative character set for code page 865 (Scandinavia) is included with *QmodemPro for Windows*.

Special RIPscrip fonts

RIPscrip terminal emulation mode has some additional features you might like to explore. On the **Options/Emulations** screen, an additional **Options** button appears on the right side of the dialog box when you select **RIPscrip** emulation.

Select the **TrueType fonts** option to use high-quality scalable fonts in place of the lower resolution RIPscrip fonts.

Caution: The RIPScrip emulation is not designed to be used with TrueType fonts. If you elect to use the TrueType fonts as replacements for the standard RIPscrip fonts you may experience screen display problems. These problems come about since the size and shape of the TrueType substitute fonts do not match the RIP fonts pixel for pixel.

The types of problems you may experience includes slightly offset text placement and overlap of text when multiple fonts are used. In cases where the screen uses an open-face font that has been filled with a color, you will probably find that the entire screen fills with the color. This is because the point selected for filling is no longer located within the boundaries of the original font character.

If you find these problems are happening regularly on the systems you call you should make use of the real RIPscrip font characters rather than the TrueType substitutes. The RIP emulation is not designed to use TrueType fonts, and our option to do so is an effort to offer an alternative higher resolution.

Changing colors

You can change the attributes of the foreground and background text colors in the terminal window, by selecting **Options/Emulations**, selecting the emulation you would like to edit, then click the **Color** button.

The foreground and background lists show all the colors available, and the sample text window allows you to preview your choices.

Keep in mind that the remote host is capable of changing the screen colors during an on-line session, and will override your local settings.

Changing the rows and columns

To change the number of rows and columns displayed in the terminal window, go to the **Options** menu, and select **Emulations.** Select the emulation you would like to edit, and make your changes in the **Terminal Size** box in the dialog box. The screen width can be changed from the default 80 columns to 132 columns, but this is useful only if the host system you call supports a screen width of 132 columns. You can also change the number of lines displayed on the screen from the default of 25. When you do this, be sure to change your user settings on the host system to accommodate the new screen length.

There are several other ways to modify the way your terminal window appears on screen. Refer to Chapter 6, *Command Reference*, under the sections **Emulations** and **Desktop** for details.

Restoring default settings

If you are not happy with the changes you've made to your terminal emulations, you can restore the original "factory defaults". The file DEFAULT.EMU in your QMWIN directory contains default settings for all terminal emulations.

Copy DEFAULT.EMU to QMWIN.EMU to restore the original settings.

Programmable Keys

There are two groups of programmable keys in *QmodemPro for Windows:* Remapped keyboard keys (KeyMaps) associated with terminal emulations, and Macro keys (at the bottom of the terminal window) associated with phonebook entries.

Emulation KeyMaps

Up to 160 reassignments may be programmed for each terminal emulation, consisting of 12 function keys and 33 additional keys in normal, shift, alternate and control positions, along with keys on the numeric keypad in numlock and cursor key modes.

To create and edit KeyMaps, go to the **Options/Emulations** menu, and select the emulation you wish to edit. Then click the **Keyboard** button.

You will see a map of the keyboard. The programmable keys are highlighted. To edit a key, select the key with your mouse and click the left button.

A dialog box will pop up labeled with the name of the key you are editing. The text entry accepts character (text) mode as a default. To enter a string in decimal or hex, select the appropriate option, below the text entry window.

The **Options** button allows you to specify how several items should operate in both the remapping dialog as well as your terminal emulation when it is active. Each item is reviewed in the following discussion.

The F10 key in Windows is used to activate the current Window menu bar. The first option allows you to retain this functionality or to remap F10 to other emulation-specific functionality.

The **Numlock** key is used by the keyboard remapper to toggle the numpad of the keyboard on your screen (while you are remapping) between numbers and arrows. When this option is set to **Keypad Toggle** it will operate in this fashion, and will also pass this functionality to the terminal screen. If it is set to **Mapped**, it will not be available to you in the

remapping window to toggle the numpad, but may be mapped to other functionality. If it is Mapped, the assigned function is active in the terminal screen, and the numpad cannot be toggled while in terminal mode.

The **Tab** key in Windows is used to move the current screen focus from one item to another. It is used in this manner in the keyboard remapper to move the highlight from key to key.

The **keyboard type** for the remapper can be changed from the 101 key style to the older 84 key style if needed.

To save your new key assignments, click the **Close** button.

Macros

Macros are assigned to buttons located at the bottom of the terminal window. Macros can also be activated using the numeric keys at the top of the keyboard along with the ALT, ALT SHIFT, ALT CTRL and ALT SHIFT CTRL keys. Up to 40 macros can thus be created.

To create and edit Macro keys, go to the **Options/Macro keys** menu.

To create a new macro file, click the **New** button. Then select the key you want to edit by clicking on the corresponding button in the dialog box, then fill in the contents of the macro in the appropriate box. Don't forget to **save** your changes.

The **Set Default** button assigns the current macro file as the default in the terminal screen, for new phonebook entries, and for phonebook entries that do not have their own macro assignments.

To edit a Macro key, load the macro file you want to edit by clicking the **Load** button and entering the file information in the common dialog box which pops up. As with the emulation KeyMaps dialog box, you can enter your data in character mode, hex or decimal.

Macro System Functions

Macro	Notes
@ADDLFTOCR [on | off]	Same as menu command **Terminal/Add LF to CR**
@AUTOANSWER [on | off]	Same as menu command **Device/Auto Answer ON/OFF**
@BREAK	Same as menu command **Device/Break**
@CAPTURE [filename | off]	Same as menu command **File/Capture**
@CLS	Same as menu command **Terminal/Clear Screen**
@DEVICE [devicename]	Same as menu command **Device/Select**
@DEVICEFINETUNE [settings]	Same as menu command **Device/Fine Tune**
@DIAL [ENTRY | GROUP | SEARCH | MANUAL] string	
	Dials the entry specified on the command line, either explicitly by entry number, a group specified by name, by searching for text within phonebook entries, or by prompting for a phone number.
@DOORWAY [on | off]	Same as menu command **Emulation/Doorway Mode**
@DOWNLOAD [filename/dir [protocol]]	
	Downloads the specified file, using the specified protocol.
@DUPLEX [on | off]	Same as menu command **Device/Full Duplex**
@EDIT [filename]	Same as menu command **File/Edit a File**

Macro	Notes
@EMULATION [emulation]	Same as menu command **Terminal/Emulation**
@EXIT	Exits *QmodemPro for Windows* completely. This command cannot be used to close the phonebook, editor, or file/GIF viewers.
@FAXAUTORECEIVE	Same as menu command **Fax/Auto Receive**
@FAXRECEIVE	Same as menu command **Fax/Receive**
@FAXRECEIVELOG	Same as menu command **Fax/Receive Log**
@FAXSEND	Same as menu command **Fax/Send**
@HANGUP	Same as menu command **Device/Hangup**
@HELP	Pops up the *QmodemPro for Windows* Help system in the Terminal Window. Same as menu command **Help/Contents**
@HOST	Same as menu command **Scripts/Host Mode Script**
@MANUALDIAL	Same as menu command **Dial/Manual Dial**
@PASSWORD	Extracted from **Password** field in current phonebook entry. This only works for systems you dial from the phonebook.

Macro	Notes
@PHONEBOOK [phonebookname]	Same as Phonebook menu command **Phonebook/Open**
@PRINTER [on | off]	Same as menu command **File/Printer Toggle**
@QUICKLEARN [scriptname]	Same as menu command **QuickLearn.**
@RESETEMULATION	Same as menu command **Terminal/Reset emulation**
@RESETMODEM	Same as menu command **Device/Reset Modem**
@SCRIPT [scriptname]	Same as menu command **Scripts/Execute**
@SCRIPTCOMPILE [scriptname]	Same as menu command **Scripts/Compile**
@SCRIPTDEBUG [scriptname]	Same as menu command **Scripts/Debug**
@SCRIPTEDIT [filename]	Same as menu command **Scripts/Edit a Script**
@SCROLLBACK [on | off]	Same as menu command **Terminal/Scrollback**
@SCROLLBACKRECORD [on | off]	Same as menu command **Terminal/Scrollback Record**
@SHELL [command]	Same as menu command **File/Shell to DOS**
@SPLITSCREEN [on | off]	Same as menu command **Emulations/Split Screen**
@STAMP [string]	Records an entry to the **log file.**
@STRIPHIBIT [on | off]	Same as menu command **Emulations/8th Bit Strip**

Macro	Notes
@TRAPSCREEN [filename]	Same as menu command **Edit/Screen to File**
@UPLOAD [filenames [protocol]]	Uploads the file or files specified on the command line, using the specified non-batch or batch protocol.
@USERID	Extracted from **UserID** field in current phonebook entry. This only works for systems you dial from the phonebook.
@VIEW [filename]	Same as menu command **File/View a File**
@VIEWGIF [filenames]	Same as menu command **File/View a GIF File**
@XONXOFF [on | off]	Same as menu command **Device/Xon Xoff**

Application examples

Following are just a few examples of how Emulation KeyMaps and Macros can be used in *QmodemPro for Windows*.

Launching Off-Line Readers and other DOS applications

The macro @SHELL allows you to open a DOS window and run a DOS application such as an off-line mail reader with the touch of a key. An example of the @SHELL macro might look like

```
@SHELL C:\OLX\OLX.EXE
```

This command runs Off-Line Xpress so you can read QWK mail packets. *QmodemPro for Windows* will change to the drive and subdirectory specified in the command line before executing the program. Substitute the path and command line for your own reader, if it is different from the example.

The next example starts Off-Line Xpress from a Windows .PIF file, create earlier in the .PIF editor. It uses whatever instructions the .PIF file contains:

```
@SHELL OLX.PIF
```

The final example specifies an executable program name only, and is executed from the QMWIN subdirectory.

```
@SHELL OLX.EXE
```

Type

```
EXIT ENTER
```

to close the DOS Shell window.

An Edit Macro

The @EDIT macro function allows you to call up the editor to edit or view a file. If a filename follows @EDIT, that file will be loaded into the editor immediately. If no filename has been specified, you will be prompted for one. For example:

```
@EDIT
```

The Windows Common Dialog box will pop up to prompt for the filename to edit.

```
@EDIT HOST.USR
```

This will edit the internal HOST user database file.

A View Macro

The @VIEW and @VIEWGIF macros allow you pop up the File Viewer and GIF Viewer with the file of your choice.

```
@VIEW QMWIN.LOG
```

This loads the QMWIN.LOG file into the viewer, and is equivalent to the **File/Log View** menu command.

```
@VIEWGIF MSI*.GIF
```

This loads all files matching the DOS Wildcard MSI*.GIF into the GIF viewer. Files are displayed in succession, with a brief pause between each screen, like a slide show.

A Script Macro

The @SCRIPT macro function causes execution of the Script whose filename follows. The .SCR script file extension is not required. The @SCRIPT macro function and the script name must be separated by at least one space. For example:

```
@SCRIPT TEST1
```

This will call the script "TEST1.SCR". Because the extension ".SCR" was not included in the filename, it is added by default.

A LOG Macro

The @STAMP macro function causes the text following it to be recorded into the current LOG file. For example:

```
@STAMP This will be put in the LOG file.
```

The LOG file entry would look like this (except with the current time and date):

```
16:26:54 01-01-94 This will be put in the LOG file.
```

The time and date will only be included if it is enabled in **Options/Files/File Definitions**.

The @USERID and @PASSWORD Functions

Special system functions have been established for use in macro definition to pull information from the phonebook and other system areas. When used in a key macro definition, @USERID and @PASSWORD can be

placed in the text to call functions that return the current phonebook entry's USERID and PASSWORD field. Whenever a connection is made, the data in these fields is available through the corresponding functions. Unlike all the other special macro commands that must appear first in the macro, the @PASSWORD and @USERID functions may be used anywhere within the macro text. For example, let's assume that JIM HARRER is my User ID, and the word "QMPRO!" is the password for the entry we have just connected to, and the following was coded for ALT 9 in **Options/Macros**:

```
@USERID @PASSWORD
```

After the connection is made, pressing ALT 9 would send the following:

```
JIM HARRER QMWIN!
```

Using these functions allows you to use the same macro key for each connection when your User ID and password are requested, as long as you have recorded this information in each dialing entry in the phonebook.

Note that although you can assign @USERID and @PASSWORD to an Emulation KeyMap or Macro, *QmodemPro for Windows* will only send the password during the actual connection. At other times no value is returned by these functions since they don't know which entry to use until a connection is made.

Menu Command Macros

Many of the more frequently used menu commands are already assigned to buttons on the Tool Bar. This provides a handy short-cut to the commands you use the most. You can also define macro buttons and function keys with menu commands you expect to use frequently.

These menu command macros have the additional advantage of being able to specify parameters. Here are some examples.

```
@EMULATION RIPscrip
```

This command changes the current terminal emulation to RIPscrip.

```
@DEVICEFINETUNE E 7 1
```

This command changes the current device settings on the fly to Even parity, 7 data bits and 1 stop bit.

```
@DEVICE USR HST DS
```

Meanwhile, this command loads a device called USR HST DS. This becomes the current device.

```
@DOORWAY
```

This command toggles **Doorway Mode**.

```
@RESETMODEM
```

This command sends the **modem initialization string** as defined in **Options/Device/Modem**, to the current device.

Special Control characters

QmodemPro for Windows has a special way of entering control characters in dialog boxes, macro commands, and scripts. Some control characters have no keyboard equivalents — for instance the half second delay — while others have keyboard equivalents which are reserved by Windows or *QmodemPro* for other uses. This includes the [ENTER] and [ESC] keys, and the [CTRL] key itself.

Control characters

The "^" caret or [SHIFT] [6] character indicates that the character immediately following should be interpreted as a control character. To send a literal "^" character, follow it with a "|" vertical bar like this "^|".

The Carriage Return character

A carriage return is usually needed at the end of a modem dialing command. In *QmodemPro for Windows* we use the [CTRL] [M] to represent the [ENTER] key. You would enter it like this:

```
^M
```

The Escape character

There may be times when you need to enter the [ESC] character in a script or macro, particularly when you call a Bulletin Board that uses a front-end mailer. The mailer usually prompts you to hit your [ESC] key twice to load the BBS. That's easy enough to do from the keyboard, but when you're trying to save that character in a macro, pressing your [ESC] key just closes the dialog box! The equivalent command code for the [ESC] is "^[".

Adding a half second pause

A special control key combination is used to pause for half a second before executing the next part of your command. Use the sequence "^~" as many times as necessary to build a delay into your macro.

Adding a two second pause

While the previous example works for sending modem commands in a macro, there is another way of sending a delay directly to the modem during a dialing command. Most modems interpret the , comma as "wait two seconds before proceeding with the rest of the command".

Character translation

Translation may be necessary when communicating with another computers whose ASCII codes (the computer's alphabet) do not match those used by your PC. All 256 characters of the IBM ASCII character set are available for translation.

Translation tables are associated with Terminal Emulations, and can be edited from the **Options/Emulations/Translate** menu. There are separate translations for incoming and outgoing data. The Input table controls which incoming characters are passed unchanged, and which are translated to other characters. The Output table controls which characters are sent out your modem to the other system.

You can strip an incoming character completely by translating the character to 0 in the outgoing translate table.

The original character is shown to the left of each list, while the result of the translation is shown on the right.

The **Edit Format** options near the bottom of the **Translations** dialog box let you view and edit your translation tables in ASCII (character mode), decimal (base 10 numeric representation of characters) or hexadecimal (base 16 alphanumeric representation of characters).

The procedure for editing a character translation is the same for incoming and outgoing translations. First, double-click on the character you want to translate. A dialog box will pop up, allowing you to enter the new value.

Text entry

Most characters can be entered in text mode by typing the corresponding letter on the keyboard. You may prefer to change edit modes and enter control characters and high ASCII characters as their decimal or hex equivalents.

Normal characters can be entered into this field using the keyboard. For control characters, use the SHIFT 6 key to produce the "^" control symbol,

then the character. For instance, to enter CTRL B, type "^B". Holding down the CTRL and typing a B will not work.

Decimal and Hex entry

High-ASCII characters that have no keyboard equivalent, for instance foreign accents and line drawing characters, must be entered in decimal or hex mode. You can find the decimal and hex values of the characters you want to translate by highlighting the desired character with one mouse click, then switching Edit Format from ASCII to Decimal or Hex. Type in the appropriate three digit number (for Decimal) or two digit alphanumeric (for Hex).

Use the **OK** button to save your changes and return to the **Options/Emulations** menu, or press the ESC key to abandon your changes.

Other communication devices

QmodemPro for Windows is able to support other kinds of connections besides an ordinary modem connected to a serial port on your PC. In most cases, these alternative devices are installed as part of your Windows configuration.

Since the installation and usage of these alternate devices varies from one product to another, we will discuss them only briefly here. For more details on how to install and use other communication devices, refer to the documentation supplied with the communication hardware, local area network, or other device you would like to use with *QmodemPro for Windows*.

Below are a number of possible configurations.

Network modems

One of the most common ways to make use of a modem on a network is through use of Interrupt 14 to redirect output to a network device. INT 14 is internally supported in *QmodemPro for Windows* without the need for additional software. If your network modem or communications server supports INT 14 you can select any of 4 channels, designated as Com1: Int 14 through Com4: Int 14. These are selectable in the same manner as standard serial ports using **Options/Device/Hardware** and choosing the appropriate port.

In situations using protocols other than INT 14 you may need to install network device drivers in your workstation running Windows. If the communications driver actually replaces a standard serial driver, *QmodemPro for Windows* will be able to recognize and use modems referenced by these device drivers. In many cases these devices, once they are set up and configured, are addressed by Windows applications as regular COM ports. The physical COM port in question need not necessarily be present in your machine — Windows looks after redirecting serial input and output to the proper device, whether it is connected to your PC or one located elsewhere on the LAN.

Your network administrator is your best source of information on the correct configuration for modems attached in this manner.

DigiBoard and other intelligent multi-port serial cards

Intelligent multi-port serial cards work well with *QmodemPro for Windows*, providing the Windows drivers for such cards are properly installed. An example is the intelligent DigiBoard card, from DIGI International. The card is supplied with a Windows driver which is installed in the same way as other Windows applications.

When the driver is installed, the configuration menu allows you to map ports on the card to Windows COM ports. As with LAN modems, the physical COM port in question need not necessarily be present in your machine — Windows looks after redirecting serial input and output to the proper port on your multiport card.

Direct Connection via Serial Cable

At times, you may want to connect two computers through their serial ports using a serial cable and a null modem. This is a useful way to copy files from a laptop PC to a desktop machine, or from a standalone word processing machine to your PC, or log into a mini or mainframe computer through a serial connection.

To set up a machine for direct connection, go to the **Options/Device** menu and create a new device called "Direct Connection". Select this new device, and click the **Modem** button. In the field for **Connect Message**, enter the word DIRECT. Leave all the other fields blank: Modem init, Dial Prefix, Dial Suffix, the various connect messages, and so forth.

The next step is to link this device to a Phonebook entry. Go to the Phonebook, select **Add**, and select "Direct Connection" as the device to use. Leave the phone number fields blank.

When you dial this entry, it will report an immediate "DIRECT connection established" message, and exit back to the terminal window. It will also run any script attached to this entry to automate logons or any other operation you need to perform.

5 - QmodemPro Host

I look upon every day to be lost, in which I do not make a new acquaintance.

Samuel Johnson

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Using the Host

The Host is a small-scale BBS program that allows you to set up your computer to receive incoming modem calls. Callers can read and post messages, upload and download files, and if you allow it, take control of your computer to run simple DOS commands.

The Host is written entirely in the *QmodemPro for Windows* Script language. Full source code is included, should you wish to study or modify the program.

While it is not designed to offer the complete range of functions available in a full-featured multi-user BBS program such as MSI's *Wildcat!* BBS, the Host is ideal for those who want a simple yet secure way to allow access to their computers over a modem connection.

Starting the Host

From Terminal Mode

From the terminal screen, select the **Script** menu, and then select **Host Mode Script**. *QmodemPro for Windows* will automatically look for and execute HOST.SCR.

From the command line

If you start *QmodemPro for Windows* with the command line parameter HOST.SCR, the program will automatically start up in host mode and be available for incoming calls.

To do this, go to the Program Manager, and select the Startup Group. From the File menu, select **New/Program Item**, and in the Command Line box, type

```
QMWIN HOST.SCR
```

The working directory should be C:\QMWIN, or the drive or directory where you have installed *QmodemPro for Windows*. You may need to edit your AUTOEXEC.BAT file as well, to start Windows automatically

when you turn on your computer. Refer to your Windows User's guide and your DOS manual if you need help.

The auto-start option is particularly useful for those who need to access their computer at home, but don't want to leave it turned on all day. Use a hardware device that turns on your computer when the phone rings a certain number of times, start Windows from your AUTOEXEC.BAT file, and put *QmodemPro for Windows* in your Startup group. Your computer will then be ready to log you in within a few moments of your call.

While Online

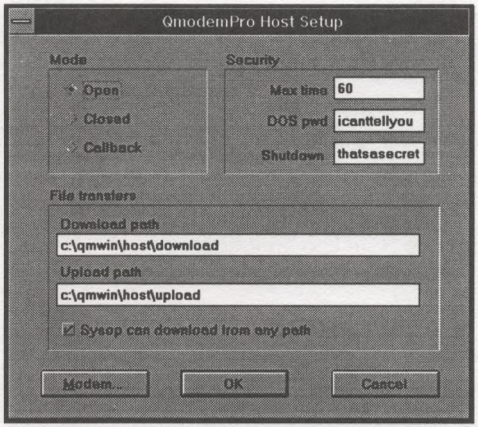
You can also start the Host while you are connected by modem to another computer. The other person you are connected to will be prompted for logon information as if the host had answered the incoming call itself.

If the caller is unsuccessful in his logon, the host will drop the connection and cycle. You may return to on-line terminal mode at any time during host operation by stopping the script. To stop a script, go to the **Scripts** menu and select **Execute**. This will toggle the script execution **off**.

Setting up the Host

Before you log in to the Host for the first time, take a few moments to configure it properly. Press your F8 key to pop up the configuration dialog box. Host settings are stored in QMWIN.INI, located in your WINDOWS subdirectory.

The setup for *QmodemPro Host* contains only a few options. However, some planning and organization is required. We recommend you read this chapter completely before beginning the setup, so that you understand the implications of each option.



Mode

The first configuration item is **Mode**. There are three selections: Open, Closed, and Callback.

Open

An **Open** system is the simplest to use and maintain. Anyone who calls your Host can log on and register as a new user. As new callers log in, the Host automatically adds them to its user record file (HOST.USR). All new users are assigned a security level of 0 (zero).

Closed

You may, however, want to restrict access to only those callers you have authorized. In a **Closed** system, only callers whose names and passwords are already defined in the HOST.USR file can log on. If the caller's name is not on file, the Host displays a brief message that the caller is not registered, and hangs up the phone.

Callback

It's possible you need even more security on your Host. A **Callback** system is similar to a Closed system in that it requires the callers' names and

passwords to be in the HOST.USR file. In addition, CALLBACK requires that the caller's DATA Phone Number also be on file.

When callers log on and successfully enter their password, they will be prompted to hang up and place their modem into Auto-Answer mode. The Host will then hang up and immediately dial the caller's data phone number. A Callback system is very secure since it insures that all communications originate from known locations.

Security

The next group of options are also **security**-related, and control time keeping and user access to optional functions.

Max Time

This defines the maximum time allowed per call, in minutes for all callers. The default value is 60 minutes. When a caller's time expires he is logged off the system, after a warning.

DOS Password

The password required to execute DOS commands from remote. The default here is blank, which disables the DOS option completely. To enable DOS commands, enter a password in this field.

If enabled, this option allows your callers to copy, list, even delete files! For obvious reasons, the password you select for this option should be one not easily guessed by callers.

Shutdown Password

To execute the **Shutdown Host** command from a remote connection, the Host requires a password. As with the DOS Password, this option is disabled by default, and can only be enabled by entering a password in this field.

If the correct password is entered, the system hangs up immediately and Host mode is terminated. For obvious reasons, the password you select for this option should be one not easily guessed by callers.

File transfers

You may wish to make **file transfers** available to your callers. The following options control which subdirectories callers can use for file uploads and downloads. By default, both these paths are blank, disabling uploading and downloading.

Download Path

All files available for download from the Host must be stored in this directory. The download path contains files that can be transferred from your host to the caller's system. Any valid DOS directory may be entered in this field. Example:

```
C:\QMWIN\HOST\DOWNLOADS
```

Only one path name may be entered, and it is the only path for downloads. Files located in subdirectories of the download path are not available to callers.

The Host **File List** command will list all the files in this directory. Do not place files in this directory unless you want to make them available to callers. The list is a simple DOS directory listing.

Upload Path

All uploaded files are stored into this directory. The upload path is the location where all files sent to you by your callers are stored. Any valid DOS directory may be entered in this field. Example:

```
C:\QMWIN\HOST\UPLOADS
```

If the Upload and Download directories are the same, all uploaded files become public and are available for download.

Sysop can download from any path

Check this option to allow those with Sysop security to specify a full drive, path and file name. This allows such callers to download any file on the

system, if the caller has a security level greater than 0, and if the complete file path and name are entered. Note that only the path specified will be listed when the F List command is used, so to use this sysop over-ride the exact path and file name must be known already.

Needless to say, if you choose to use this option, you must exercise discretion in allowing sysop security to other users of your Host.

Modem

The **Modem** button on this dialog box allows you to set up the currently selected device to answer incoming calls.

Init

This command string is sent to the modem each time the *QmodemPro Host* is started, and after each call. For Hayes compatible modems, the Host Initialization string should set Verbose result codes (Q0V1), disable Auto-Answer (S0=0), and place the modem on hook waiting for calls (H0). Do not include an auto-answer setting in the Init string since the host mode uses the result codes from the modem to look for a ring, and then it instructs the modem to answer the phone.

Answer

The Answer string is sent to the modem when an incoming call (RING) is detected. For Hayes compatible modems, use the command ATA^M. The ^M sends a Carriage Return after the ATA.

Disabling the auto answer feature of your modem may seem like an odd thing to do when you're setting up your computer to answer calls, but it is actually more reliable, not to mention safer, to let the software answer the phone rather than the modem.

Say, for instance, a caller shelled to DOS and accidentally dropped the connection. If the phone rings before your computer notices the loss of carrier, the modem will go ahead and answer. This new caller, whose identity is unknown, now picks up where the old one left off, sitting at a DOS prompt, with the Host none the wiser.

There are certain measures you can take to minimize or even eliminate the risk. The best way is to prevent your modem from answering the phone unless *QmodemPro Host* tells it to.

Busy

This allows you to place the modem Off-hook when you log in as the local Sysop. Your phone line will return a busy signal preventing callers from connecting to the host system. This string is usually simply ATH1 which tells the modem to pick-up the phone and place a busy signal on the line, but don't dial. If you add the command M0 it will also tell the modem to turn **off** the speaker so you don't hear the recorded message telling you to hang up the phone and dial again.

Most host systems want to place a busy signal on the line when the sysop is using the system locally. However, if you don't care if callers get ringing without an answer you can leave this field blank.

OK Message

Most modems return an OK message when the last command was received and executed successfully. For Hayes and compatible modems, use OK. For modems that do not return a response to the Initialization command, leave this field blank. If you modem can't be set to send verbal result codes you may need to set this item to 0 (zero), the numeric equivalent of OK for most modems.

Ring

When an incoming call is detected by the modem, it returns a special Ring Detect message. For Hayes and compatible modems, this is the word RING. When the ring detect message is received, the Host sends the Answer Command to the modem.

If you modem returns something other than the word RING, enter it here.

Ring Count

The Answer command is sent after detecting the number of rings in this field. If you want the modem to answer the call on the third ring, enter 3.

Sysop Commands

Several keys on the local keyboard perform special functions while *QmodemPro Host* is running. These keys can initiate a chat with a caller, disconnect a caller, cancel a file transfer, and more.

At all times, Host Mode will accept input from the remote caller as well as from the local keyboard. The sysop, for example, may come to the rescue of a caller by typing commands directly. These keystrokes will be processed as if they had been typed by the remote caller.

F1 Local logon

Press F1 to log on to *QmodemPro Host* locally. All Host commands except Upload and Download are available in a local logon. This is a handy way to test various aspects of your system from the point of view of a remote caller. When you are finished your local logon session, use the **Goodbye** command to log off. When you log on locally the Busy command is sent to the modem.

F2 Chatting with the Caller

You can chat on-line with a caller by pressing the F2 key. This key is also used to answer a page from a caller. The sysop chat screen looks something like this:

```
(60 min. left) Qmodem Host Command >>_
You are now Chatting with the Sysop
```

Both caller and Sysop may type at will; the display will look the same on both computers. End-of-Line wordwrap takes place automatically in CHAT mode.

Press F2 again to exit CHAT mode. The message

```
Returning you to Host Mode
```

will be displayed and the caller will be returned to the Main Menu.

Canceling a file transfer

Use the **Cancel** button on the file transfer status window if you need to abort a caller's upload or download without waiting for the file transfer to finish.

Disconnecting a Caller

You may for any number of reasons need to disconnect a caller immediately from the *QmodemPro Host*. The **Hangup** command on the Device menu drops the connection instantly, with no notification to the caller.

User commands

Here is a list of commands available to callers when they are logged on to the *QmodemPro Host*:

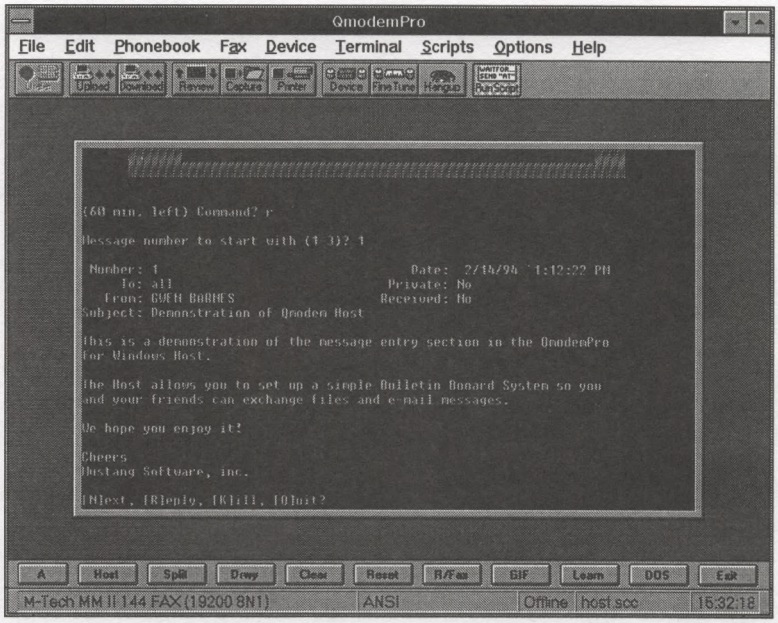
R Read Messages

The **Read** command is used to read messages. Unlike more advanced On-Line Services or Bulletin Board Systems, the Host does not keep track of each caller's Last Message Read. It is up to callers to remember the number of the last message they read.

If the caller presses ENTER at the "Start with Msg" prompt, the READ command is canceled and the Main Menu is displayed.

If the number entered is lower than the number of the first message, reading will start with the first available message. Likewise, if the number entered is higher than the highest message number, the last valid message will be read.

Following is a sample message-reading session:


QmodemPro
File Edit Phonebook Fax Device Terminal Scripts Options Help
Upload Download Preview Capture Printer Device Fine Tune Hangup RunScript
(60 min. left) Command? r
Message number to start with (1-1)? 1
Number: 1 Date: 2/14/94 1:12:22 PM
To: all Private: No
From: GWEN BARNES Received: No
Subject: Demonstration of Qmodem Host
This is a demonstration of the message entry section in the QmodemPro for Windows Host.
The Host allows you to set up a simple Bulletin Board System so you and your friends can exchange files and e-mail messages.
We hope you enjoy it!
Cheers
Mustang Software, inc.
[N]ext, [R]eply, [K]ill, [Q]uit?
A Host Split Dmsy Clear Reset R/Fax GIF Learn DOS Exit
M-Tech MM II 144 FAX (19200 8N1) ANSI Offline host.scc 15:32:18

Message headers contain Message Number, To, From, Subject, and Date & Time information. Message marked "(private)" or "(killed)" can only be viewed by callers with SYSOP Security or by the caller who left the message.

After reading a message, the caller is prompted for one of the following actions:

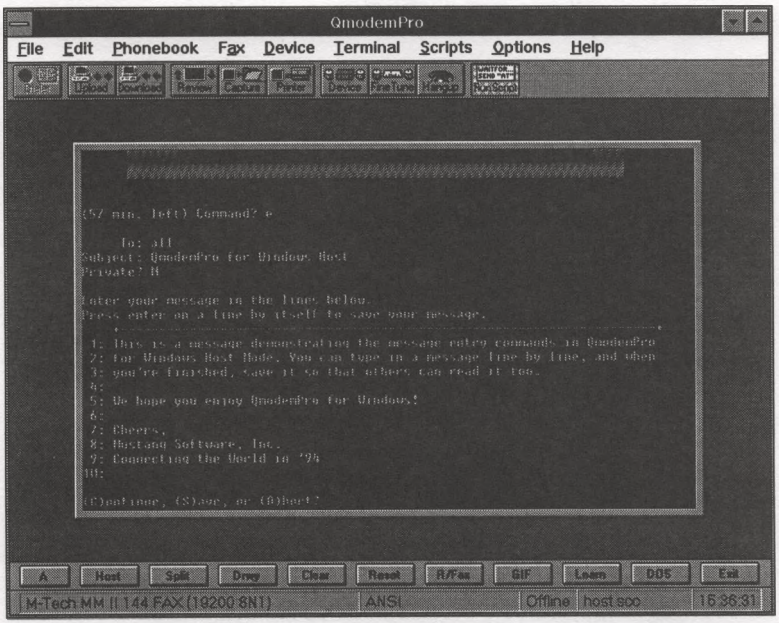
[N]	to read the next message.
[R]	Reply to the message just read.
[K]	Kill the message (Sysop or recipient only).
[Q]	Quit and return to the Main Menu.

E Enter a Message

The **Enter a Message** command is used to create a new message. The caller will be prompted for the name of the recipient, the subject of the message, and the security status of the message (private or public). The caller is then placed in the message editor.

Messages may have up to 16 lines of 72 characters each. As text reaches the end of the line, it automatically wraps to the next line.

Following is a sample message entry session:


QmodemPro
File Edit Phonebook Fax Device Terminal Scripts Options Help
(57 min. left) Command? e
To: All
Subject: QmodemPro for Windows Host
Private? N
Enter your message in the lines below.
Press enter on a line by itself to save your message.
1: This is a message demonstrating the message entry commands in QmodemPro
2: for Windows Host Mode. You can type in a message line by line, and when
3: you're finished, save it so that others can read it too.
4:
5: We hope you enjoy QmodemPro for Windows!
6:
7: Cheers,
8: Mustang Software, Inc.
9: Connecting the World in '94
10:
(C)ontinue, (S)ave, or (A)bort?
A Host Split Dmp Clear Reset R/Fax GIF Learn DOS Exit
M-Tech MM II 144 FAX (19200 8N1) ANSI Offline host scc 15:36:31

At the end of the message, the caller presses ENTER twice to terminate message entry. The Host will then display the (C)ontinue, (S)ave or (A)bort prompt.

(C) Continue with message entry

The last line with text is displayed with the cursor following the last non-blank character. Use this option if you exited the message editor and wish to continue typing.

(S) Save the Message

The message is saved and the user is returned to the Main Menu. If the message was entered as a reply, the next message, if any, will be displayed.

(A) Abort the Message

The message is deleted and the user is returned to the Main Menu. If the message was entered as a reply, then the next message, if any, will be displayed.

The end-of-message prompt will also be issued automatically when the messages reaches the 99-line maximum.

P Page the Sysop

When someone **Pages the Sysop**, you and the caller will hear a series of beeps, and the following message will appear on the screen:

```
Paging Sysop. Press any key to abort...
```

The sysop's screen shows an additional message, instructing the sysop to press F2 to answer the page and begin chatting with the caller. If the page is not answered by the system operator after about 20 seconds, the Host will terminate the page, inform the caller that the sysop is unavailable, and return the caller to the Main menu.

F File Directory

The **Files Listing** command lists the contents of the Host Download Directory. If the directory exceeds one page, the display is paused, and the caller is prompted to continue, stop the display, or show the entire list nonstop.

D Download Files

The **Download** command lists the Protocol menu file HOST.PRO if found, otherwise the default list of protocols is displayed.

The caller can then select the desired protocol and is then prompted to enter a filename. During the transfer, the standard *QmodemPro for Windows* send file status window will be displayed.

Before the download begins, the Host checks for the existence of the file on disk. If the file does not exist, the caller's Download request is canceled.

If a batch protocol is selected, the user is prompted for up to 20 filenames to download. Filenames can contain the wild card characters * and ?.

U Upload Files

When the **Upload** command is selected by a caller, the Host first looks for the alternate protocol menu file PROTS.HST. If it is found, it is displayed. If not, the list of default protocols is displayed.

The caller can then select the desired protocol. A filename prompt will be displayed next for the file transfer. During the transfer, the standard *QmodemPro for Windows* receive file status window will be displayed.

The meanings of Uploads and Downloads are reversed while in Host Mode. An Upload by the caller is a Download to the Host, and vice-versa.

S Shell To DOS

The **Shell to DOS** command allows callers to use internal DOS commands to list directories, copy existing files, rename files, delete files, change directories, make directories, remove directories and type text files to the screen. The caller will be prompted for a password, and if the password is entered successfully, the Host will allow access to these DOS commands. This DOS shell is not actually a link to DOS on the Host. It is an internal Host function that looks like DOS and passes the commands to the Host PC system. Programs cannot be run from remote. Activities are limited to the commands specified above.

G Goodbye (Hang-Up)

The **Goodbye** command logs off a caller and drops the modem connection. The modem goes back on-hook and *QmodemPro Host* returns to the "Waiting for call..." screen.

? Help With Host

The "?" command will display HOST.HLP if found. This is a generic **Help** file that should tell the caller what all the commands are and briefly what they do. It should also mentioned that more help is available by typing in a ? followed by the command in question. This will display a file by the name of HOST[character].HLP where [character] is the command letter they want more help with. Sample Help files are included, and may be modified, if desired.

Z Shut Down Host

The **Shutdown** command can only be entered by users that have sysop security (security level 1). In addition, they must also know the shutdown password. When the correct password is entered, the Host hangs up and returns to the *QmodemPro for Windows* Terminal screen. For security reasons this option is not shown on the default menus.

Exiting the Host

To exit Host Mode, press F9 while the system is waiting for a call. You will be returned to the Terminal window and the Modem Initialization string will be sent to the modem. Terminating the Host script by clicking on the Script icon on the toolbar also results in the termination of host mode.

Receiving Faxes with the Host

If your Fax modem has "adaptive answer" capability, *QmodemPro for Windows* Host will switch automatically to "receive Fax" mode when an incoming Fax call is detected. When the Fax has been received, *QmodemPro for Windows* will disconnect and go back to Host mode.

Files used by the Host

QmodemPro Host uses several files to store data about callers, E-mail messages, menus, and help screens. Some of these files are required for operation, while others are optional.

System Files

HOST.USR

The User File is the only required file to run Host Mode. HOST.USR contains users' Names, Security Levels, Passwords, and optional Callback phone numbers. If HOST.USR does not exist, it will be created automatically the first time Host Mode is started.

The file HOST.USR is a standard ASCII file. It can be edited with the *QmodemPro for Windows* Editor or any standard text editor (for example, QEDIT, Notebook, or word processors that can edit unformatted ASCII files). The HOST.USR file layout is as follows:

```
First Last,Password,Security-Level,Callback-# ;Comments
```

Each field is separated by a comma, and comments must be preceded by a semicolon. The Callback Number is required only if you have selected the CALLBACK system type. Information in the Password File is not case-sensitive (JANE, Jane, and jane are interpreted identically).

Following is a sample HOST.USR file:

```
John Friel,Password,1,1-805-555-1646 ; MSI Qmodem R&D
Joe Caller,Qmodem,0; another example
Jane Doe,Friendly,0,555-1212 ; yet another
```

Records may be in any order — the SYSOP record need not be first. In the example above, the first and last entries have a CALLBACK number and will work in a CALLBACK system, while the second entry will not.

Security Levels may be 1 or 0. Level 1 provides **sysop** access, so users at this security level may shut down the system from remote (as long as they

know the password). Take care to assign security levels above 0 (zero) *only* to those that you want to have sysop access.

Message Files

Two files are created by the Host the first time it is run:

HOST.HDR	The Message Header file.
HOST.MSG	The Message Text File.

These two files are maintained by *QmodemPro Host*. Do not try to edit or modify these files in any way, or system errors may occur when callers attempt to read or enter messages.

Packing the Message Base

The only maintenance required by the system operator on the message base is periodic deletion of killed messages. Press F7 at the Waiting for Calls screen to pack out these deleted messages. The deleted message space will be removed from both HOST.MSG and HOST.HDR, reducing their size.

Menu Files

These menu display files are ASCII text and can be edited by you to customize the look of your Host. A default set of menu files is included.

HOST.PRE	The opening screen sent to all callers
HOST.MNU	The Host Main Menu
HOST.PRO	The protocol list for Up/Download commands
HOST.OFF	The logoff screen sent to all callers when they say Goodbye.

Help Files

These help display files are ASCII text and can be edited by you to customize your Host. A default set of help files is included.

HOST.HLP	Generic Help about the Host, including a brief command summary.
HOSTD.HLP	Help on the Download command. You can edit this file to provide additional information, if desired.
HOSTE.HLP	Help on the Enter Message command. Instructions on entering a message.
HOSTF.HLP	Help on the File List command. Tells the caller about your downloadable files.
HOSTG.HLP	Help on the Goodbye command.
HOSTP.HLP	Help on the Page Sysop command. This explains what hours the sysop is available for paging, or instruct the caller to leave a message if the sysop is not available to chat.
HOSTR.HLP	Help on the Read Message command. Instructions on reading messages.
HOSTS.HLP	Help on the Shell to DOS command. Instructions on executing supported DOS commands, and how to return to the host when finished.
HOSTU.HLP	Help on the Upload command.
HOSTZ.HLP	Help on the Shutdown Host command.

Color in Display Files

QmodemPro Host supports colors in display files using the standard ANSI color codes. These codes may be placed anywhere desired to alter the color of the display. However, if you use ANSI codes in your display files, all callers must have ANSI emulation active to view the screens correctly. Callers without ANSI capabilities will see the codes rather than the colors.

6 - Reference

Don't be "consistent" but be simply true.

Oliver Wendell Holmes

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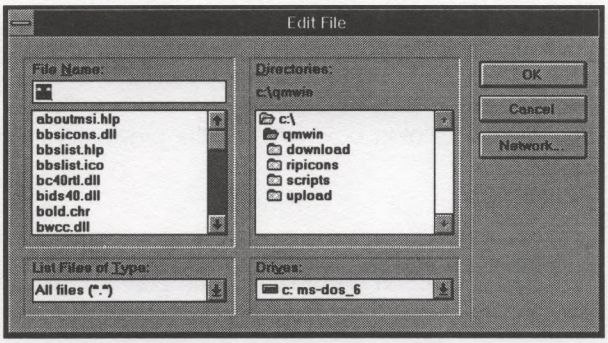
"Generic" dialog boxes

Some dialog boxes occur in many places throughout the program and perform generic functions such as file selection, directory selection, help screens and printer setup.

Open/Edit/Select/View a File (Windows Common Dialog Box)



This box allows you to select a file, and browse other directories and drives.

File Name

Type in the file name, if you know it, or use DOS Wildcards * and ? to narrow your search.

Directories

Select a directory to open by double clicking on the directory name. An open file folder icon appears beside the directory listed in the File Name window.

List Files of Type

This window normally lists files that can be opened by the application or menu command which popped up the Common Dialog Box. Click on the arrow to the left of the window to view other selections.

Drives

Click on the arrow on the right side of this window to see other drives.

OK

Accept your selection and proceed with your command, or in the case of a configuration dialog box, return to the previous window, screen or dialog box.

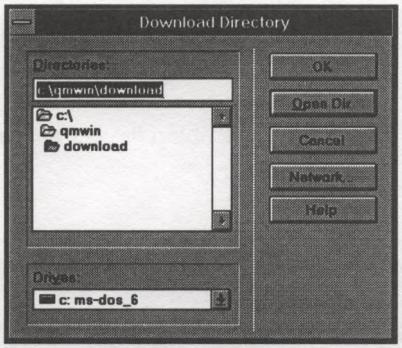
Cancel

Discard your selection and return to the previous window, screen or dialog box.

Help

Pops up a help screen describing the current dialog box or operation.

Select Directory



This dialog box is shown when only a directory selection is needed.

Directories

Select a directory to open by double clicking on the directory name. An open file folder icon appears beside the directory listed in the File Name window. You can also type the desired full directory path in the file window.

Drives

Click on the arrow on the right side of this window to see other drives.

OK

Accept your selection and return to the previous window, screen or dialog box.

Open Dir

Opens the selected directory. Has the same effect as double clicking on the directory name.

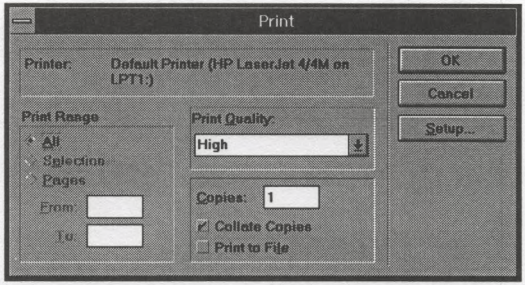
Cancel

Discard your selection and return to the previous window, screen or dialog box.

Help

Pops up a help screen describing the current dialog box or operation.

Print



This dialog box allows you to print a text or graphic file or a selection from a text file. This is a standard Windows Print Dialog Box.

Printer

This is the printer *QmodemPro for Windows* will use to print the current document. To change this, go to the **Setup** button on this dialog box.

Print Range

While **Print Range** options are shown on the Print dialog box, these options are not applicable to the Editor or Viewers, so they are grayed out. The **Print** function supports only printing the full document.

Print Quality

The options in this box and the effects they produce depend on the options offered by your printer driver. If this box is dimmed, this option is not available for the selected printer.

Print to File

Default: Off

Save the file to another file that contains commands that can be sent to the printer from DOS. You will be prompted for a file name after you choose the OK button to close the Print dialog box.

Copies

Default: 1

Indicate the number of copies to be printed.

Collate Copies

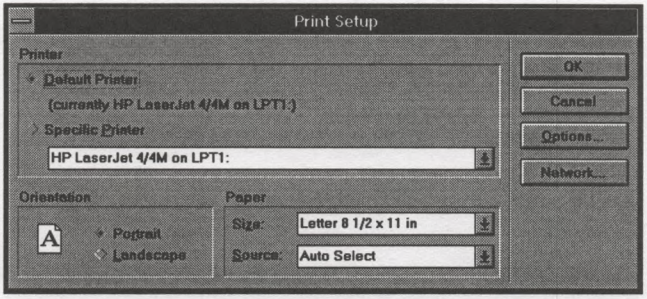
Default: On

Prints multiple copies in sets, from first page to last page. If this option is turned off, multiple copies of page 1 are printed, followed by multiple copies of page 2, and so on.

Setup ... [button]

Opens **Print Setup** dialog box.

Print Setup



This dialog box allows you to select and configure your printer. The appearance of this dialog box may vary, according to the capabilities of your printer. Refer to your Windows documentation for information on printer setup.

Help Screens

The Windows Help system is extremely comprehensive, and offers an easy way to search for topics that interest you, jump from one topic to another, annotate entries and print help topics. The *QmodemPro for Windows* help system takes full advantage of the Windows help engine.

Command Overview

The Command Overview lists each menu command in order by the menu on which it appears. Click on the text of a topic that interests you for more information.

Contents

The Contents lists How-To information in a logical order, from simple to complex categories. Click on the text of a topic that interests you for more information.

Index

The Index lists each menu command in alphabetical order. Click on the text of a topic that interests you for more information.

How to Use Help

Pops up the help screen for the Windows help system. This series of screens explains how to use Windows help.

Reference Section

8th Bit Strip [menu command]

Where: QmodemPro/Terminal

See Also: Emulation Options

A check mark appears beside this menu selection when **8th Bit Strip** is toggled on.

Some computer systems, for example CompuServe and GEnie, use the high bit of each 8-bit character for parity checking. If the **high bit** is not removed, the screen display will consist of high-order ASCII characters (ASCII 128+) such as foreign, graphic, or scientific characters.

If you see garbage or foreign characters on your screen, try turning **on** the **Terminal/8th Bit Strip** command.

About QmodemPro ... [menu command]

Where: QmodemPro/Help

This menu selection displays an information window about *QmodemPro for Windows*. Your registration information is shown in the lower part of the window.

Add Entry ... [menu command, button]

Where: Phonebook/Edit Menu + Tool Bar

See Also: Revise Phonebook Entry
"The Phonebook", Chapter 3

Adds an entry to the end of the Phonebook. The **Add Entry** command pops up the **Add Phonebook Entry** dialog box into which you can enter information about the new entry.

Add LF to CR [menu command]

Where: QmodemPro/Terminal

See Also: Emulation Options
ASCII Options

A check mark appears beside this menu selection when **Add LF to CR** is toggled **on**.

Various computers differ in how they indicate the end of a line of text. The IBM PC and compatible computers require two characters: a **Carriage Return** plus a **Line Feed** to end a line and move the cursor down to the beginning of the next line.

Meanwhile, other computers use only one character to indicate a new line. The result, if this setting is incorrect, is that text lines will be overwritten on your screen. if this is the case, turn **on** the **Add LF to CR** command from the **Emulation** menu.

Append [menu command]

Where: Phonebook/Edit

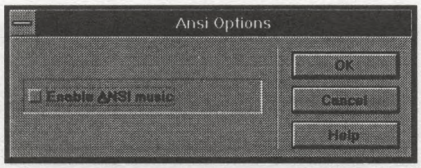
See Also: Cut
Copy
Paste

The **Append** command pastes phonebook entries from the Clipboard to the **End** of the Phonebook, rather than at the cursor location.

ANSI Options [dialog box]]

Where: QmodemPro/Options/Emulation Options/Options

See Also: Sounds
Emulation Options
"Changing the Appearance of the Desktop", Chapter 4



This toggle controls whether ANSI encoded music will be played through the PC speaker when it is received.

To be recognized by *QmodemPro for Windows*, encoded music must conform to the following format:

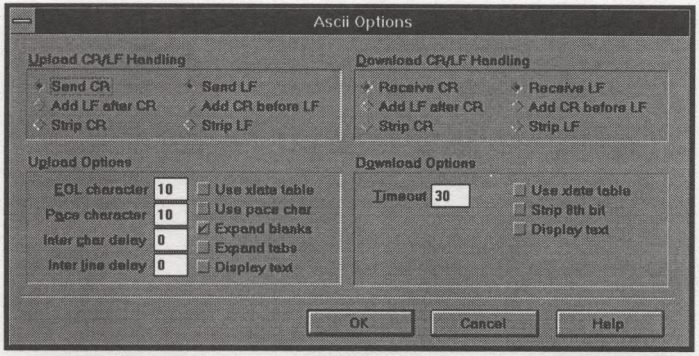
ESC [M . . . . music codes . . . . ^N

The music codes are in the format of the BASIC "PLAY" statement, and must end with the ^N (ctrl-N) character. If the ^N character is missing, it is assumed that the following text, up to 255 characters, is playable music.

ASCII Options [dialog box]

Where: QmodemPro/Options/Protocols/ASCII

See also: Add LF to CR
8th Bit Strip
Emulation Options
Emulation Translation Table
Upload Status



Upload CR/LF Handling

DOS files with carriage returns and line feeds may cause unexpected behavior on non-DOS computers. When you use ASCII protocol to send a text file to a computer that uses something other than the standard DOS carriage return/line feed way to indicate the end of a line, you may need to add or strip these characters from your document as it is sent.

Send CR

Default: ON

If this option is **on**, Carriage Return characters in your document are as is, without being stripped or translated.

Add LF after CR

Default: OFF

If this option is toggled **on**, a trailing Line Feed is added after each Carriage Return in the document you are sending.

Strip CR

Default: OFF

If this option is toggled **on**, all Carriage Returns are removed (stripped) from the document as it is uploaded.

Send LF

Default: ON

When this option is **on**, Line Feed characters in your document are sent as is, without being stripped or translated.

Add CR before LF

Default: OFF

When this option is toggled **on**, a leading Carriage Return is added before each Line Feed.

Strip LF

Default: OFF

When this option is toggled **on**, all Line Feeds are removed (stripped) from the document as it is uploaded.

Upload Options

Besides carriage return/line feed handling, several other options are available when *QmodemPro for Windows* sends a text file using ASCII protocol.

EOL character

Default: 10 (decimal representation of LF character)

Otherwise known as End Of Line Character, this is the character that your text editor uses as the last character in a line. Most often, this is a Line Feed character, which is usually preceded by a Carriage Return. The EOL character is used to tell *QmodemPro for Windows* when a line has ended. This information is needed for **Pacing** and **Inter line delay** described below.

If your text editor or word processor uses a different EOL character, perhaps to indicate a soft return, enter its decimal value here. Setting this value incorrectly results in a jerky or incomplete transmission.

Pace character

Default: 10

If a pacing character is specified, and the **Use pace char** box is checked, *QmodemPro for Windows* will wait until that character is received before it sends the next line of text. If this entry is blank, the transfer will not pause between lines of text. Use this only when you are sure that the remote system *always* prompts for each line of text with the same character. To change the setting, enter the decimal ASCII value for the character desired.

As an example, suppose you want to upload a message to your local BBS. The message was created with the *QmodemPro for Windows* text editor. Many BBSs start each message line with a colon ":" (58 decimal), which we can use as the pacing character.

If the BBS also terminates message entry when a blank line is received, be sure to set the Expand Blanks option to **on**.

In some cases, you may want to control transmission pacing yourself. By setting the pacing character to ASCII 126 (a ~ tilde, or any other character which *you know* will not be received by the other system), *QmodemPro for Windows* will pause after sending each line, and wait for you to press

the ~ (tilde) key to send the next line. Repeat this procedure until the entire file has been transmitted.

Inter char delay

Default: 0

This is the number of milliseconds to pause between sending characters during an ASCII upload. Try increasing this number if the host system has problems accepting ASCII uploads at full speed.

Inter line delay

Default: 0

This is the number of milliseconds to pause between sending lines during an ASCII upload. Consider increasing this number if you upload prepared text into the message editor on a BBS. The pauses allow the BBS to accept and store each line of data, and return to the editing prompt.

Use Xlate table

Default: OFF

When set to **on**, outgoing data is translated according to the translation tables for the emulation currently in effect.

Use pace character

Default: OFF

When set to **on**, *QmodemPro for Windows* looks for the character entered in the **Pace Character** field as a signal to send a line of text.

Expand blanks

Default: OFF

This option controls whether or not blank lines (lines which contain only a Carriage Return and/or Line Feed and no other text) should be expanded to include at least one SPACE as a leading character.

Note that many BBSs and on-line services interpret a blank line, as defined above, as an end-of-message indication. If your text contains blank lines, the first one will cause the other system to stop receiving message text, issue an end-of-message prompt, and wait for your input. Since additional message text is still being sent, unpredictable results can occur. Setting Blank Line Expansion **on** will eliminate this problem.

Expand tabs

Default: OFF

When set to **on**, a tab character in the original text is translated to 8 spaces. When this option is **off**, the literal tab character (09 decimal) is sent.

Display text

Default: OFF

When set to **on**, text is displayed on the terminal screen during an ASCII upload. When set to **off**, the display of text during an ASCII upload is suppressed, and the upload status window will pop up, displaying the progress of your upload.

Download CR/LF Handling

Line feed handling may be important in how data is received. For example, lines of data sent by a mainframe computer end with a single LF (Line Feed). If you wish to save the incoming data to a file and edit it with an editor or word processor, a carriage return character should be added in front of each trailing LF and the ASCII download options should be set to turn **off** translation, perform no special Carriage Return handling, and Add CR to Line Feeds.

Receive CR

Default: ON

If this option is **on**, Carriage Return characters in your document are saved as is, without being stripped or translated.

Add LF after CR

Default: OFF

If this option is toggled **on**, a trailing Line Feed is added after each Carriage Return in the document you are receiving.

Strip CR

Default: OFF

If this option is toggled **on**, all Carriage Returns are removed (stripped) from the document as it is downloaded.

Receive LF

Default: ON

When this option is **on**, Line Feed characters in your document are saved as is, without being stripped or translated.

Add CR before LF

Default: OFF

When this option is toggled **on**, a leading Carriage Return is added before each Line Feed.

Strip LF

Default: OFF

When this option is toggled **on**, all Line Feeds are removed (stripped) from the document as it is downloaded.

Download Options

Timeout

Default: 30

Because not all DOS files are terminated with a CTRL Z End of File Marker, *QmodemPro for Windows* needs another way to determine if an ASCII download is complete. The Timeout value is the amount of time *QmodemPro for Windows* will wait after receiving the last character before it terminates the transfer and saves the file.

Use Xlate table

Default: OFF

When set to **on**, incoming data is translated according to the translation tables for the emulation currently in effect.

Strip 8th bit

Default: OFF

Ignores the high bit, and saves only 7 bit characters. This option might be required if the system or on-line service sends the 8th bit and causes weird looking foreign language characters to appear on your screen instead of regular text.

Display text

Default: OFF

When set to **on**, text is displayed on the terminal screen during an ASCII download. When set to **off**, the display of text during an ASCII download is suppressed, and the download status window will pop up, displaying the progress of your download.

Auto Answer On/Off [menu command]

Where: QmodemPro/Device

These commands send the **Answer on** and **Answer off** strings respectively, specified in the Device Configuration for the currently active device. The default for Answer On is ATS0=1^M,. while the default for Answer Off is ATS0=0^M.

Auto Receive ... [menu command]

Where: QmodemPro/Fax

See Also: Receive Log

This menu command turns on **Auto Receive Fax** mode. If your modem is capable of receiving CLASS1 or CLASS2 Fax, *QmodemPro for Windows* will automatically answer Fax calls and receive the incoming Fax messages as files on disk, providing the selected device is configured for Fax..

When Auto Receive is selected the **Receive Log** dialog box is displayed with the Auto-receive option checked. From that dialog box you can view, print or delete Fax messages.

Auto-Indentation [menu command]

Where: Text Editor/Options

Default: OFF

Auto-indentation or "sticky indent" causes the text in a paragraph to line up with the left margin established by the first line in the paragraph. A check mark on the menu indicates that Auto-Indentation is turned **on**.

With auto-indentation **on**, the editor produces an effect something like this:

```
First line of text indented from left
margin, followed by more text, and
more text, and still more text.
```

With auto-indentation turned **off**, the effect looks more like this:

```
First line of text indented from left margin, fol-
lowed by more text, and more text, and still more text.
```

Break [menu command]

Where: QmodemPro/Device

See Also: Device Connection
"Fine Tuning", Chapter 3

This selection sends a BREAK signal. **Break** is a special signal generated by the serial adapter, used to notify the receiving computer of a specific condition. In most cases, Break is used to tell the other computer to interrupt whatever it is doing.

Capture [menu command, button]

Where: QmodemPro/File Menu + Tool Bar

See Also: "Generic" dialog boxes
Scrollback to
Screen to
Log Toggle
File Definitions

The **Capture File** is a recording of an on-line session. As the session progresses, incoming data is written to a text file as well as to the terminal window. When you open the Capture file, a dialog box will pop up prompting you to accept or modify the default Capture file name and path.

Clear Screen [menu command]

Where: QmodemPro/Terminal

This command clears the terminal window, resets the screen colors to the default and returns the cursor to the top left corner of the window.

Clear Scrollback [menu command]

Where: QmodemPro/Terminal

See Also: Scrollback to
Screen to
Clear Screen
Reset Emulation

This command empties all previous information from the scrollback buffer and begins recording again from the current screen.

Copy [menu command, button]

Where: QmodemPro/Edit
File Viewer/Edit Menu + Tool Bar
GIF Viewer/Edit Menu + Tool Bar
Text Editor/Edit Menu + Tool Bar
Phonebook/Edit Menu + Tool Bar
Fax Viewer/Edit Menu + Tool Bar

See Also: Cut
Paste
"Viewing a File", Chapter 3
"The Editor", Chapter 4

Copies the current selection to the Windows clipboard. Note that anything you copy to the clipboard will *replace* the current clipboard contents.

Cut [menu command, button]

Where: Text Editor/Edit Menu + Tool Bar
Phonebook/Edit Menu + Tool Bar

See Also: Copy
Paste

Copies the selected text to the clipboard, and deletes the text from the document. Note that anything you copy to the clipboard will *replace* the current clipboard contents.

Delete [menu command]

Where: GIF Viewer/File

Use this command to **delete** the file you are currently viewing, from the disk. If you downloaded a GIF picture and didn't like it, this is an easy way to get rid of it and free up the disk space it would have occupied.

Delete Entry [menu command, button]

Where: Phonebook/File Menu + Tool Bar

Deletes (removes) the currently selected Phonebook entry or entries. A confirmation window will pop up before the entries are removed. Note that this deletion is permanent!

Desktop ... [menu command]

Where: QmodemPro/Options

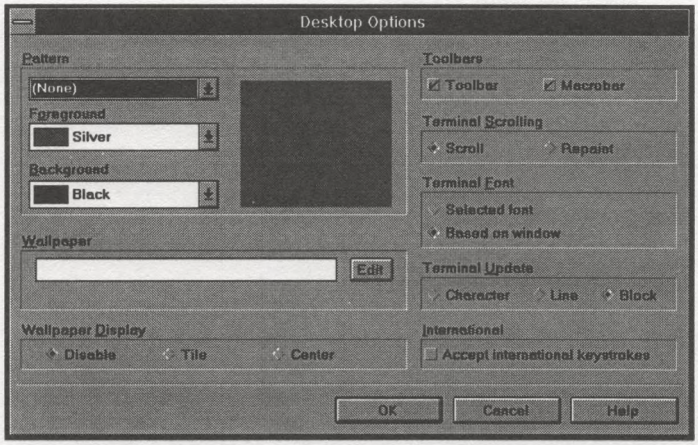
See Also: Desktop Options
Emulation Options
Macro Keys
"Customizing the desktop", Chapter 3
"Changing the appearance of the terminal screen", Chapter 4

The Desktop menu allows you to assign colors, patterns and other options to the desktop surrounding the terminal window.

Desktop Options [dialog box]

Where: QmodemPro/Options/Desktop

See Also: Emulation Options
Macro Keys
"Customizing the desktop", Chapter 3
"Changing the appearance of the terminal screen", Chapter 4
"Programmable Keys", Chapter 4



The desktop pattern and wallpaper are displayed on the area of the screen surrounding the terminal window. The procedure for modifying these settings is the same as the one used in the Windows Control Panel for modifying the Windows desktop.

Pattern

Default: NONE

The **Pattern** option is similar to the one in the Windows Control Panel Desktop dialog box. The selected pattern is displayed in the terminal window, on the screen area outside the borders of the terminal screen.

Foreground
Background

These two list boxes show the colors from which you can make your selection.

Wallpaper

Default: Disabled

Wallpaper is simply a bitmap file created by applications such as Windows Paintbrush. You can place a bitmap file in a repeating pattern, or centered on your screen, where it will be displayed in the areas of the *QmodemPro* window surrounding the terminal screen.

Wallpaper will be displayed on top of any desktop pattern you have selected. If the wallpaper is tiled, the desktop pattern will be covered up.

Filename

Type the name of the .BMP file you want to select, or use the **Edit** button to pop up a dialog box allowing you to select among different files, paths and drives.

Disable

When **on**, no wallpaper is displayed.

Tile

When **on**, the .BMP file is repeated across the screen.

Center

When **on**, the .BMP file is displayed in the center of the screen.

Toolbars

You can display or hide the Tool Bar and Macro bar on your screen.

Toolbar

Default: ON

The Tool Bar contains buttons for frequently-used commands and is displayed at the top of the **QmodemPro** window below the menu bar.

Macro bar

Default: ON

The Macro bar has user-defined buttons displayed at the bottom of the *QmodemPro* window. These buttons correspond with the numeric keys in various shifted, control and alternate combinations.

Terminal Scrolling

Default: Scroll

These two options determine how *QmodemPro for Windows* displays new incoming data on your terminal screen.

Both options have the same net result of showing the newest text at the bottom of the screen, with older text moving up and off the top of the screen, the difference being that depending on your video drivers, one option will be faster and smoother than the other. Trial and error is probably the best method for determining the settings that work best with your system.

Scroll

This option **scrolls** the screen when a new line of data is displayed.

Repaint

This option **repaints** the screen completely when a new line of data is displayed.

Terminal Font

Default: Selected font

This option provides two ways to determine the size of the terminal screen, and the size of the characters displayed inside the terminal screen. Both options are affected by the terminal font you select in the **Emulation Options** dialog box.

Selected font

This is the default setting, which uses the **selected font** and size to determine the size of the terminal window. You must manually select a different font size in **Emulation Options** to change the size of the terminal window.

Based on window

This setting changes the size of the terminal font **based on window** size. You can enlarge or reduce the size of the *QmodemPro* window by dragging the side or corner of the window with your mouse. The fonts in the terminal screen will change size according to the size of the window, if different sizes are available.

Terminal Update

Default: Line

The behavior of this option, like the Terminal Scrolling option, depends on your video drivers, and controls how often *QmodemPro for Windows* updates the screen to display incoming data. If your video hardware is fast enough to keep up with the modem, try **Character** or **Line**. With slower video hardware and drivers, try **Block** for a faster display.

Character

With this option, *QmodemPro for Windows* displays each character as it is received. This is the slowest method.

Line

QmodemPro for Windows waits for a line of text to arrive before updating the screen.

Block

The screen is updated less often than in line mode, and is updated a block at a time. The size of the block depends on several factors, including how much and how fast the data arrives, and what else the CPU is doing at the time.

Accept International Keystrokes

Default: OFF

This option is people to use QmodemPro for Windows in a language and character set other than Code Page 437 (North American English). If you are using a different Code Page, and get the wrong characters when you type, try turning this option on.

Device ... [menu command]

Where: QmodemPro/Options

See Also: Device
Edit Devices
"Devices", Chapter 3
"Other Communication Devices", Chapter 4

Opens the **Edit Devices** dialog box. From this dialog box, you can select, add and modify devices associated with one or more modems connected to your PC.

Device [button]

Where: QmodemPro/Tool Bar

See Also: Select Device
"Devices", Chapter 3
"Other Communication Devices", Chapter 4

Opens the **Select Device** dialog box. This button allows you to select a device (modem) to use for the current operation.

Device [menu]

Where: QmodemPro/Main Menu

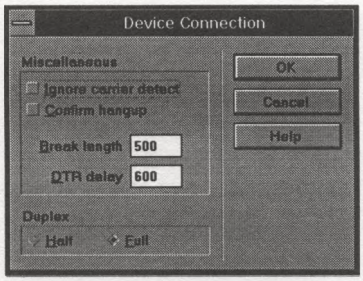
See Also: Options

The **Device** menu allows you to select from any available devices, and **Fine Tune** or change certain settings for the current device. Devices are installed and configured from the **Options/Device** menu.

Device Connection [dialog box]

Where: QmodemPro/Options/Device/Edit Devices/Connection

See Also: Hangup
Xon/Xoff
Break
Full Duplex



Ignore carrier detect

Default: OFF

Some modems always default to reporting Carrier Detected (CD) until told to report the *true* state of carrier. If this is the case, *QmodemPro for Windows* will pop up a dialog box when it starts, asking if you want to send the modem initialization string.

If your modem cannot be set to report the *true* state of carrier detection, turn this option **on**.

In most other cases, however, it is best to leave this option toggled **off**.

Confirm hang-up

Default: ON

When this option is **on**, *QmodemPro for Windows* will pop up a dialog box when you request the hang-up command, confirming that you do in fact want to hang up the modem and break the connection.

Break length

Default: 1000

This is the number of milliseconds to send the BREAK signal, when requested. You should normally leave this value at the default, unless there is a specific reason to change it.

DTR delay

Default: 1000

This is the number of milliseconds to lower the DTR (Data Terminal Ready) signal, when used in conjunction with the Hangup command. Lowering DTR is the standard method of telling the modem to hang up. You should normally leave this value at the default, unless there is a specific reason to change it.

Use of DTR to hang up only becomes active if your settings for **Options/Device/Modem/Hangup** is set to DTR.

Full/Half Duplex

Default: Full

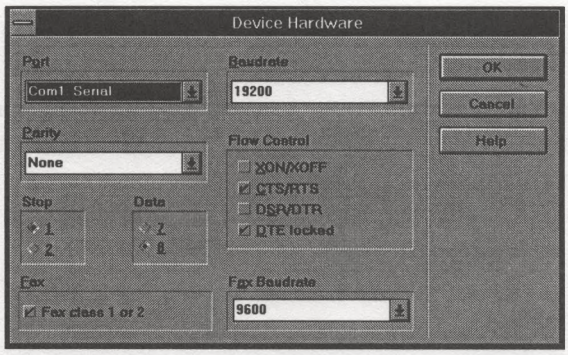
Duplex describes the method used to display your keystrokes on the terminal screen. In Full Duplex mode, the host system echoes your keystrokes back to you. In Half Duplex mode, the host system does not echo your keystrokes, so *QmodemPro for Windows* must do it instead.

For most connections you can use full duplex, since the remote system will echo your keystrokes.

Device Hardware [dialog box]

Where: QmodemPro/Options/Device/Edit Devices/Hardware

See Also: Fine Tune



Port

Default: COM1 Serial

This is the COM port number associated with the device. Select the port number to which your modem is connected. Select **Serial** if your modem

is connected directly to your PC, which is the case for the majority of users.

If you are using a network modem that uses INT 14 connectivity you can select INT 14 without loading any special drivers on the workstation.

If you are using another type of network modem, and if you have already installed the appropriate network modem drivers in Windows, follow the instructions with the network modem drivers for the proper port settings.

Parity

Default: None

Parity is used as a simple means of error checking. Parity values are None, Odd, Even, Mark and Space. This value must match that used by the host system being called.

Most Bulletin Board Systems and Online Services use None (no parity), the default value. CompuServe uses Even parity.

Stop

Default: 1

Stop bits are generated by the serial port to isolate transmitted characters. The majority of computer systems recognize 1 stop bit, the default value. Supported values are 1 and 2. As with other parameters, this value must match the host computer's setting.

Data

Default: 8

Characters transmitted over modem connections are made up of data bits. Supported values are 7 and 8. For systems which support text and binary program file transfers (that is, most PC-based Bulletin Board Systems), 8 data bits are required. Mainframe and minicomputer-based systems, including CompuServe, commonly use 7 data bits. As with other parameters, this value must match the host computer's setting.

Fax class 1 or 2

If your modem supports CLASS1 or CLASS2 Fax protocol, turn this toggle **on**. This will enable the send and receive Fax functions in *QmodemPro for Windows*. If your modem does not support sending or receiving Fax messages, leave this option turned **off**.

Baud rate

Default: 2400

The baud rate is the speed at which the COM port operates and should in most cases match the top speed of the device, or the locked DTE speed. High speed modems, that is, modems with nominal baud rates of 9600, 14400, 16800 and higher, should always be set with the DTE locked to a higher baud rate than the actual connect speed, to enable hardware flow control, data compression and error correction. Thus, the correct setting for a 9600 or 14,400 baud modem would be 19200 or higher.

Baud rates of 155200 and higher are supported with the use of a Hayes ESP serial card.

Flow Control

There are several types of flow control settings used by *QmodemPro for Windows*.

Xon/Xoff

Default: OFF

Xon/Xoff is a software flow control protocol used during normal text and ASCII transmissions. It uses CTRL S and CTRL Q characters to stop and start the flow of data.

Mainframe systems can use Xon/Xoff as a way to pace *text* data transmissions. Most BBS systems do not use Xon/Xoff.

If the Xon/Xoff switch is **on**, *QmodemPro for Windows* will send the Xoff character when its receive buffer is almost full.

As text is displayed, the receive buffer empties and can accept more data. *QmodemPro for Windows* then sends the Xon character to resume transmission.

CTS/RTS

Default: ON

CTS/RTS is known as hardware handshaking. It makes use of the CTS (Clear To Send) and RTS (Request To Send) signals on your serial port.

This is a faster and more reliable method of flow control because it is performed by the modem hardware, and is the recommended setting for high speed and error-correcting modems.

In order for CTS/RTS flow control to function properly, the serial cable (if you are using an external modem) must support the CTS and RTS signal lines.

DSR/DTR

Default: OFF

DSR/DTR flow control is similar to CTS/RTS, but uses the Data Set Ready and Data Terminal Ready signal lines.

This flow control setting is only used in special situations which require it, and should normally be switched **off**.

DTE Locked

Default: ON

The DTE (Data Terminal Equipment) speed, or port speed, is the rate at which your computer sends data to the serial port, as opposed to the speed your modem sends data to the other modem.

High speed modems work best when the DTE rate is locked at a higher speed than the actual connect speed. This allows the modems themselves

to negotiate the fastest connection between them. For instance, a 9600 or 14400 modem should have the Baud rate set to 19200 or 38400. Some modems are capable of higher locked baud rates, but the maximum practical speed depends on the speed of your CPU.

When both the sending and receiving modems lock the DTE rate and use a streaming transfer protocol such as Zmodem, the characters per second performance can actually *exceed* the nominal baud rate of the modems.

If DTE is not locked, the DTE connection matches the modem connect speed. To operate properly, your modem must also be told to lock the DTE in the initialization string.

So, for best performance with a high speed modem, leave this toggle **on**.

Fax Baud rate

Default: 9600

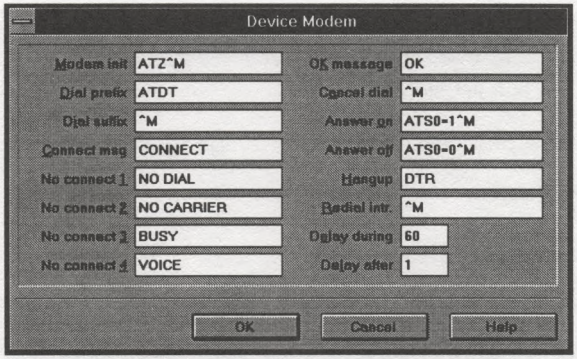
This is the maximum Fax baud rate supported by your Fax modem. *QmodemPro for Windows* will automatically negotiate a lower rate upon connection, if necessary.

Allowable values are 2400, 4800, 7200, 9600, 12000 and 14400. Consult your modem manual for the correct setting here.

Device Modem [dialog box]

Where: QmodemPro/Options/Device/Edit Devices/Modem

See Also: Device Prefixes
Phonebook
"Special Control Characters", Chapter 4



This window allows you to define the command strings and result codes used by *QmodemPro for Windows*.

Modem initialization

Default: ATZ^M

This is the **initialization string** sent to the modem to restore it to its standard operating parameters. It is sent when *QmodemPro for Windows* is started, and when the menu choice **Device/Reset Modem** is selected. The command in this window may vary depending on the modem being used; consult your modem manual for an explanation of each command in the initialization string. The ^M (SHIFT 6 + M) is translated to a carriage return or CTRL M.

Dial prefix

Default: ATDT

This command is used to tone-dial a number on a Hayes compatible modem. This signals the modem to dial the numbers sent immediately after this command. If your phone system requires pulse dialing, change the dial prefix to ATDP.

The dialing commands may vary depending on the kind of modem. Consult the modem manual for additional information. If your modem requires a 150 millisecond BREAK signal for dialing, change this command to the word BREAK.

Adding *70 after the ATDT dial command disables call-waiting on some tone-dialing phone systems. On pulse-dialing phone systems try adding 1170 after the ATDP command. Check with your local phone company to see if these features are supported.

Dial suffix

Default: ^M

This string immediately follows the number to be dialed. The normal suffix is a carriage return [CTRL] [M], entered as ^ ([SHIFT] [6]) M.

See the discussion in Chapter 5 of **Special Control Characters** for more information on how to enter control code sequences in macros, modem command strings, and scripts.

Connect Message

Default: CONNECT

This message is returned by the modem when it establishes a successful connection. Most modems will also report the connect speed as part of the message, for instance:

```
CONNECT 19200
```

Do *not* include a speed value as part of this message since it will vary.

If you are making a direct connection to another PC without the use of modems, enter the word DIRECT in this field. See the section on **Direct connection** in Chapter 4 for more detailed information.

No connect 1 - 4

Defaults: BUSY
NO CARRIER
NO DIAL
VOICE

These messages are reported by the modem when it could not establish a connection. These messages are used to tell *QmodemPro for Windows* that a connection was not made, and that it should recycle and dial again. Your modem may return messages slightly different from the examples shown above; refer to your modem manual for exact wording.

OK message

Default: OK

The modem returns an "OK" message when the last command was received and executed. For Hayes compatible modems, use OK. For modems which do not return a response to the initialization command, leave this field blank.

Cancel dial

Default: ^M^M

This string will be sent to the modem when you cancel a dial request. If the modem supports lowering DTR (Data Terminal Ready), to disconnect, enter the letters DTR in this field. Consult your modem manual for information on this feature.

Answer on

Default: ATS0=1^M

This command puts the modem into Auto Answer mode, and is sent when you select the **Device/Auto Answer ON** menu command. The modem will answer the phone on the first ring, and will try to negotiate a connection.

Answer off

Default: ATS0=0^M

This command takes the modem out of Auto Answer mode, and is sent when you select the **Device/Auto Answer OFF** menu command. The modem will not try to answer the phone when it rings.

Hangup

Default: DTR

Most modems recognize the lowering of the DTR (Data Terminal Ready) signal as a disconnect method. To enable this method, enter the letters DTR in this field. This hardware-only method is far more reliable than using a modem software command, which could easily fail because of timing requirements or line noise.

The modem command entered here is sent to the modem when **Device/Hangup** or the **Hangup** button are selected.

If your modem does not support the lowering of DTR to hang up, try entering

```
^~^~^~+++^~^~^~ATH0^M
```

This command will cause Hayes compatible modems to hang up most of the time. Each ^~ sequence creates a 1/2 second delay, and the +++ sequence means "escape and go into command mode". The command ATH0 tells the modem to go back on hook, and the ^M ends the com-

mand string. Enter the word BREAK in this field if your modem or switchboard requires a 150 millisecond BREAK signal to disconnect a call.

See the discussion in Chapter 5 of **Special Control Characters** for complete information on how to enter control code sequences in macros, modem command strings, and scripts.

Redial interrupt

Default: RING

If *QmodemPro for Windows* receives this string from the modem during dialing, it will stop dialing immediately. If you are sharing a voice line with your modem, this allows you to answer the incoming phone call. If your modem is connected to its own dedicated phone line, you can leave this field blank.

Delay during

Default: 60

This is the number of seconds *QmodemPro for Windows* waits for a connection after dialing a number. When this period has elapsed, *QmodemPro for Windows* will hang up the modem, wait, then dial the next number, if any, or redial the same number. The default value is 60 seconds.

Most modems also feature their own internal time-out delay. When dialing, the shortest of these two values — hardware or software — will prevail, so make sure that your modem's initial time-out value is at least equal to the *QmodemPro for Windows* setting. In Hayes compatible modems, the command ATS7=60 will set the modem's internal delay to 60 seconds.

Delay after

Default: 10

This is the number of seconds *QmodemPro for Windows* waits after an unsuccessful dial attempt (that is, a BUSY signal, expired dial time or

manual cycle), before trying the next number in the dialing queue. The default value is 10 seconds. This is also referred to as the **cycle** time.

Device Name [dialog box]

Where: QmodemPro/Options/Device/Edit Devices/Name

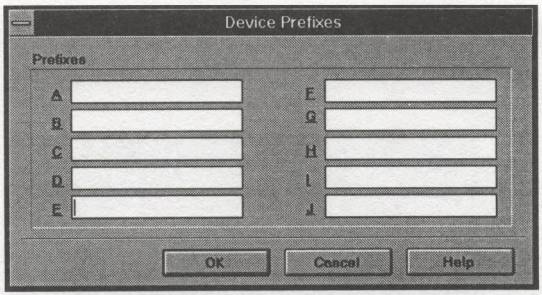
See Also: Device
Fine Tune
"Devices", Chapter 3
"Other Communication Devices", Chapter 4

This dialog box allows you to change the name of a device. In most cases it's a good idea to use a device name which describes the modem, and any special settings you may have applied to this device configuration.

Device Prefixes [dialog box]

Where: QmodemPro/Options/Device/Edit Devices/Prefixes

See Also: Phonebook
Revise Phonebook Entry
Manual Dialer

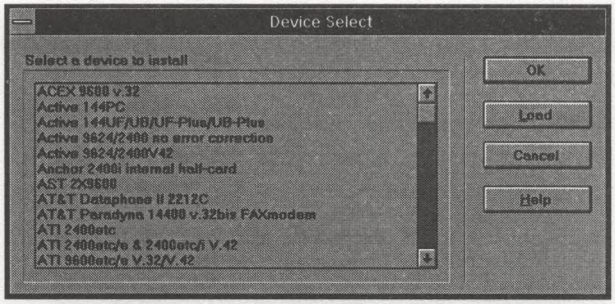


QmodemPro for Windows allows up to 10 prefix codes per device, assigned to the letters A through J. Each prefix code can store up to 30 characters. You can use multiple prefix codes in any position in the number field, although you should keep in mind that most modems can take a maximum of only 40 characters in a single command string.

Device Select [dialog box]

Where: QmodemPro/Options/Device/Edit Devices/Quick Config

See Also: Edit Devices



Use this command when you install a new modem in your PC. The **Quick Configuration** allows you to select your modem from a list of pre-configured settings, and automatically program your modem with the settings that work best with *QmodemPro for Windows*. This procedure will automatically program your modem with the settings that work best with QmodemPro for Windows.

Select a device to install

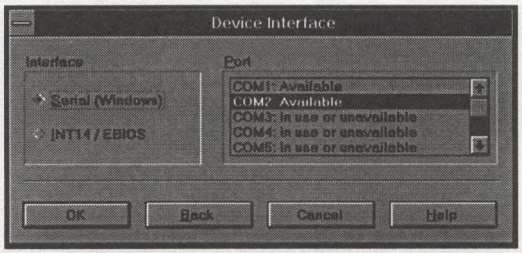
Select your modem from a list of pre-configured definitions. If you cant find your modem on this list, choose one of the Generic modems which most closely matches your own modems baud rate and features.

Load

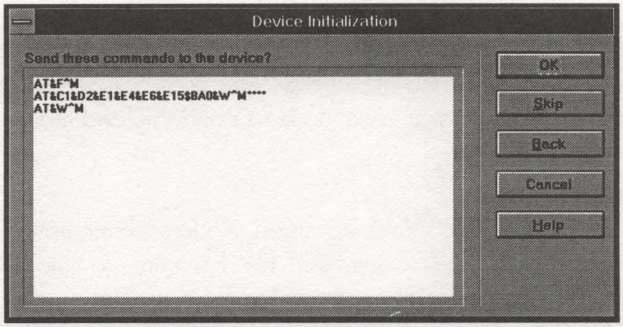
QmodemPro for Windows stores modem configuration information in a Device Definition Table or DDT file. From time to time, Mustang Software, Inc. updates these files and makes them available for download from the MSI HQ BBS and other online services. To select a different DDT file, click the LOAD button.

OK

Click the OK button when you have selected your modem from the list. *QmodemPro* will search your computer's hardware to find available com ports. This procedure may take some time, occasionally more than a minute as it talks to each port it finds. Your computer may appear hung during this process — it will resume the configuration procedure in a minute or so. When it has finished searching, the following dialog box will appear.



The settings shown in the next dialog box are the commands *QmodemPro for Windows* will use to program your modem. Click the **OK** button to proceed. Another window may pop up with switch settings and technical notes on making the best use of your modem.

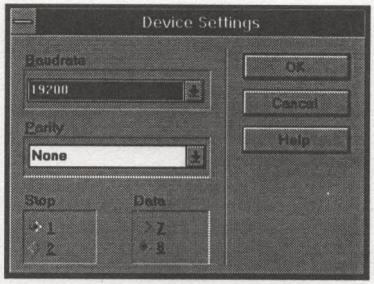


Click the **skip** button if you don't want to send these commands to the modem.

Device Settings [dialog box]

Where: QmodemPro/Device/Fine Tune

See Also: Device Hardware
"Devices", Chapter 3



This dialog box allows you to **fine tune** your current device settings. Changes take effect for the current session only. If you change devices, your settings will revert to the ones associated with the new device.

If you need to use this option frequently, consider making these alternate port settings available as an additional device. Go to the **Options/Device** menu, and **Duplicate** your current device, making the necessary changes there. It's then a simple matter to associate a device with the alternate port settings, with a Phonebook entry.

For an explanation of how to use the **Baud Rate, Parity, Stop** and **Data** entries, please refer to the **Device Hardware** entry above.

Dial [menu command, button]

Where: Phonebook/Dial Menu + Tool Bar

See Also: Dialer
"The Phonebook", Chapter 3

Immediately starts to dial any entry or entries tagged in the Phonebook. The **Dialer** dialog box will pop up, showing the list of systems to dial, and the progress of the current call. When a connection is established, the Dialer dialog box disappears and *QmodemPro for Windows* goes into Terminal mode.

Dialer [button]

Where: QmodemPro/Tool Bar

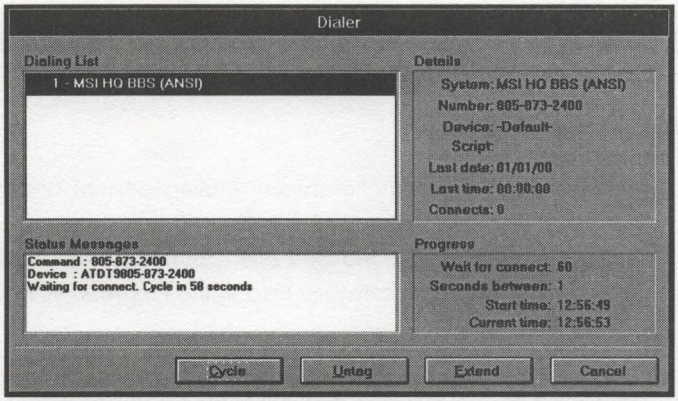
See Also Phonebook

Opens the **Phonebook** window.

Dialer [dialog box]

Where: Phonebook/Edit/Group/Edit Groups/Dial
Phonebook/Dial/Dial
Manual Dial/Dial

See Also: Group
Manual Dial
Send Fax



The Dialer dialog box displays the current status of the call being dialed.

Dialing List

The **dialing list** window shows all entries in the current dialing queue. The entry currently being dialed is highlighted in a contrasting color.

Details

The **Details** window shows information about the entry currently being dialed. This information is extracted from the Phonebook entry for that particular system.

Status Messages

The **Status Messages** window shows a list of commands sent to the modem, responses from the modem, and connect messages. When a successful connection is established, the Dialer dialog box is replaced by the Terminal Screen, or the Fax Status dialog box, depending on the type of connection made.

Progress

The **Progress** window shows the number of seconds to wait for a connection, the seconds between dialing attempts, the current time, and the start time for the current dialing attempt.

Cycle

The **Cycle** button aborts the current dialing attempt and goes on to the next entry in the dialing queue. If there is only one entry in the dialing queue, that entry will be redialed after pausing for the number of seconds shown in the **Seconds between** field in the Progress window.

Untag

The **Untag** button removes the highlighted entry from the dialing queue. Any entry, active or not, can be selected.

Extend

Use the **Extend** button to extend the length of time *QmodemPro for Windows* will wait for a successful connection with the current entry. Use this if the **Wait for connect** counter is nearing zero and the system has not answered the phone or the modems have not yet established a connection.

Note that modems usually have an internal timer that may override the time extension. Refer to your modem manual for instructions on changing this internal setting.

Cancel

The **Cancel** button aborts the current dialing attempt and closes the Dialer dialog box.

Directory ... [menu command]

Where: QmodemPro/Phonebook

See Also Phonebook

Opens the **Phonebook** window.

Doorway Mode [menu command]

Where: QmodemPro/Terminal

See Also: Emulation Options
Emulation Keyboard Mapping

Default: OFF

Doorway mode allows you to send the entire PC Keyboard Scan Codes across the line to the remote system. This is most often used with BBS systems that make full use of the arrow keys and PG UP and PG DN. You can go into Doorway mode from the **Terminal/Doorway mode** menu command. Note that doorway mode can only be used if the system you are calling also has installed support for the doorway emulation.

A check mark appears beside this menu selection when Doorway Mode is toggled on. The remote host can often turn Doorway Mode on in *QmodemPro* automatically when needed.

Download ... [menu command, button]

Where: QmodemPro/File Menu + Tool Bar

See Also: Select Download Protocol
Path Definitions
Protocol Options
"Uploading and Downloading Files", Chapter 3
"What to do with Compressed Files", Chapter 3
"Viewing a File", Chapter 3

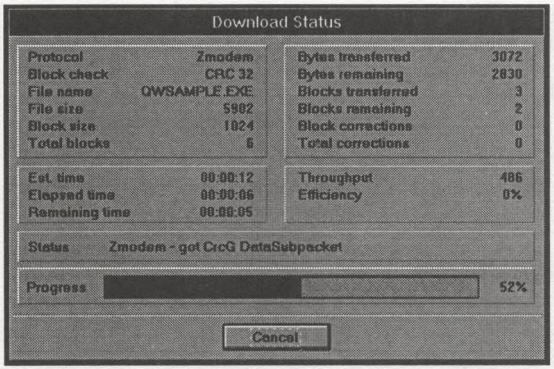
Downloading refers to copying one or more files from a host computer such as a BBS, or an Online Service, onto your computer. Normally, the **Download** command first opens the **Select Download Protocol** dialog box, and then prompts for a download path. Some file transfer protocols, such as Zmodem and CIS B+, can start automatically, bypassing the path selection. Other protocols, such as the various flavors of Xmodem, require you to enter a file name as well as a path before beginning the file transfer.

The default download path is taken from the **Options/Path Definitions/Download Path** dialog box entry.

Download Status [dialog box]

Where: QmodemPro/File/Download

See Also: Upload Status



Protocol

Displays the current file transfer protocol.

Block check

This indicates the error correction mode: Checksum, CRC 16, CRC 24, or CRC 32, depending on the transfer protocol in use.

File name

The name of the file currently being received.

File size

The size in bytes of the file currently being received. Some transfer protocols, such as Xmodem, do not send this information, so this field may be blanked out.

Block size

The size of the block currently being received. Block size is dependent on transfer protocol. For instance, Xmodem CRC transmits files in 128 byte blocks, while Ymodem transmits 1 kilobyte (1024 byte) blocks. Zmodem adjusts the block size depending on line conditions, but defaults to 1 kilobyte blocks.

Total blocks

The total number of blocks in the file currently being received. Some transfer protocols do not send this information, so this field may be blanked out.

Bytes transferred

The number of bytes already received in the current file.

Bytes remaining

The number of bytes remaining to be received in the current file, if known —depending on the transfer protocol.

Blocks transferred

The number of blocks already received in the current file.

Blocks remaining

The number of blocks remaining to be received in the current file, if known.

Block corrections

The number of times the current block has been retransmitted due to errors detected during the transfer.

Total corrections

The total number of block corrections for the current transfer.

Est. time

The total estimated time to receive the current file, if file size is provided by the transfer protocol. Estimated time is calculated from the reported connect speed, size of the file, elapsed time for the current transfer, and the remaining number of bytes and blocks to be received. The estimated time is recalculated periodically based on the current transfer performance.

Elapsed time

The total elapsed time since the beginning of the current file transfer, in hours, minutes and seconds.

Remaining time

The estimated time to receive the remainder of the current file, if the file size is provided by the transfer protocol. Remaining time is calculated from the reported connect speed, size of the file, elapsed time for the current transfer, and the remaining number of bytes and blocks to be received. The remaining time is recalculated periodically.

Throughput

The number of characters per second received during the current file transfer. This value is recalculated periodically, and represents an average throughput for the file currently being received.

Efficiency

Efficiency is calculated in percent, based on a calculation of the connect speed reported by your modem and the average characters per second.

Status

This window displays any messages generated by the protocol before, during and after the transfer. Most of these messages are for notification purposes only, and do not necessarily indicate an error.

Progress %

This is a graphical thermometer style display, showing a visual representation of the percentage of the file which has already been received, if file size information is provided by the transfer protocol.

Skip (Zmodem only)

Press this button to skip the current file and go onto the next file in the batch.

Cancel

This control button cancels or aborts the current file transfer. *QmodemPro for Windows* will stop receiving the current file and return to the terminal window.

Edit [menu]

Where: QmodemPro/Main Menu
File Viewer/Main Menu
GIF Viewer/Main Menu
Text Editor/Main Menu
Phonebook/Main Menu
Fax Viewer/Main Menu

See Also: Cut
Copy
Paste
Add
Insert
Delete
Append

The Edit menu contains commands for copying, cutting and pasting text within a window. Different windows offer different options, appropriate to the kind of operations available in that window. The File Viewer, for instance, allows you **Copy** text to the clipboard, but since you're only view-

ing and not editing the file in the window, the **Cut** and **Paste** commands are not available. Meanwhile, the Text Editor has Cut and Paste commands, and the Phonebook offers additional Editing selections to add and remove Phonebook entries.

Edit a File ... [menu command]

Where: QmodemPro/File

See Also: "The Editor", Chapter 4

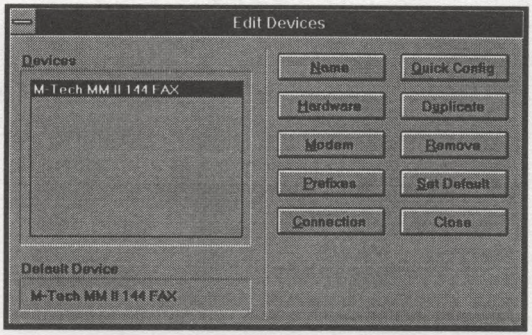
QmodemPro for Windows contains a text editor suitable for creating and editing scripts, text files, batch files, and other files which need to be edited and saved as plain ASCII text.

You will be prompted to select a file to edit, which will then be loaded into the Text Editor window. For detailed instructions on how to use the *QmodemPro for Windows* editor, see Chapter 5, *Advanced Operation*.

Edit Devices [dialog box]

Where: QmodemPro/Options/Device

See Also: Device Name
Device Hardware
Device Modem
Device Prefixes
Device Connection
Device Select
Fine Tune



This dialog box lists the devices you have configured, and the current device, and allows you to add, edit and delete devices from the list.

Devices

This is a list box of available devices. Up to 10 separate devices can be created. To select a device for editing, move the mouse pointer to the device you want to select, and click the left mouse button.

Default Device

This window shows the name of the default device. To select a device as your default, highlight it in the Device list, and click the **Set Default** button. The default device is activated at startup.

Name

This is the name assigned to the device. To change the name, click the **Name** button and enter the new name in the text entry window that pops up.

Hardware ...

This button pops up the **Device Hardware** dialog box which allows you to assign baud rate, parity, port ID and flow control to a device.

Modem ...

This button pops up the **Device Modem** dialog box allowing you to enter modem commands and result strings.

Prefixes ...

This button pops up the **Device Prefixes** dialog box allowing you to enter prefixes for modem dialing commands.

Connection ...

This pops up the **Device Connections** dialog box controlling a variety of settings which affect an on-line connection.

Quick Config ...

This pops up the **Device Select** dialog box, allowing you to add and configure a modem as a device in *QmodemPro for Windows.*

Duplicate

Copies the selected device and appends the copy to the end of your Device list. This is useful in cases where you want to use the same device, but with different initialization or dial strings, or parity settings, to accommodate different host systems you call.

Remove

Deletes the highlighted device.

Set Default

Sets the highlighted device as the default device for terminal window commands and new Phonebook entries.

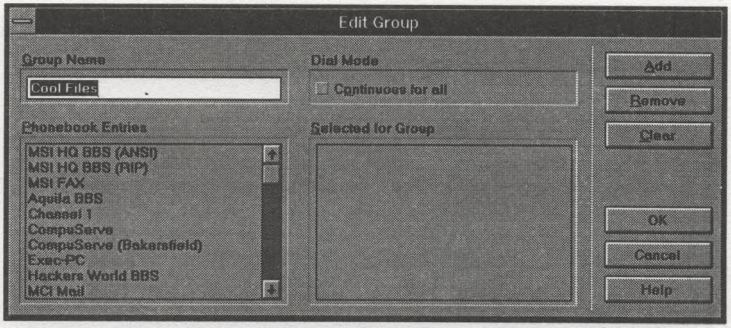
Close

Closes the dialog box and saves your new device settings.

Edit Group [dialog box]

Where: Phonebook/Edit/Groups/Edit Groups

See Also: Edit Groups
Phonebook
"The Phonebook", Chapter 3



The **Edit Group** dialog allows you to define and assemble multiple phonebook entries into a group.

Group Name

Use the **Group Name** field to store the name of the group, using a descriptive name such as "Mailrun" or "Games" or "Local BBSs" or anything else that describes what these systems have in common.

Dial Mode

Default: OFF

Check the **Continuous Dial** box to dial each entry until you have connected with each system on the list. If this box is not checked, the dial session will stop after the first connection.

Phonebook Entries

The **Phonebook Entries** list shows all the entries in the current Phonebook. To select an entry, highlight it with a click of the left mouse button, then click the **Add** button, or double-click the entry..

Selected for Group

The **Selected for Group** list shows the Phonebook entries belonging to this group. To remove an entry, highlight it with the left mouse button, then click the **Remove** button. You can also double-click an entry to remove it.

Add

Adds the selected entry or entries in the Phonebook Entries list to the Selected for Group list.

Remove

Removes the selected entry or entries from the Selected for Group list.

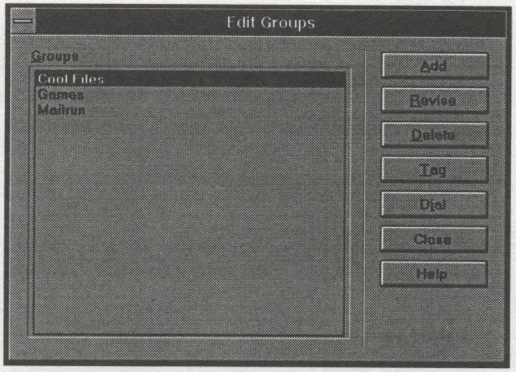
Clear

Removes all entries from the Selected for Group list.

Edit Groups [dialog box]

Where: Phonebook/Edit/Groups

See Also: Edit Group
Phonebook
"The Phonebook", Chapter 3



This dialog box allows you to create and maintain Groups of Phonebook entries, and mark members of the selected group for dialing and other operations.

Add

Pops up the **Edit Group** dialog box, allowing you to create a new Group.

Revise

Pops up the **Edit Group** dialog box, with information from the selected Group, ready for editing.

Delete

Deletes the selected group or groups.

Tag

Tags all phonebook entries matching the list of entries in the selected group and closes the dialog box. From there, you can dial, revise, or delete the tagged Phonebook entries.

Dial

Immediately dials all entries in the selected group. The **Dialer** status window pops up, showing the progress of the queued calls.

Emulation ... [menu command]

Where: QmodemPro/Terminal

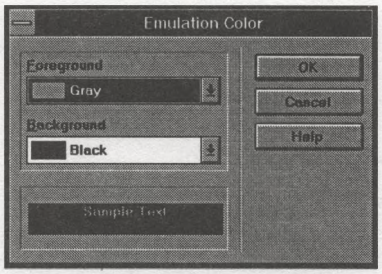
See Also: Emulation Options

Terminal Emulation allows *QmodemPro for Window* to behave like (emulate) a terminal other than the standard IBM compatible PC. Over 30 different terminal emulations are available in *QmodemPro for Windows*. When you select a terminal emulation, keyboard and video information is interpreted so that your PC behaves as if it were a native terminal of the selected type.

Emulation Color [dialog box]

Where: QmodemPro/Options/Emulation Options/Color

See Also: Emulation Options
"Customizing the desktop", Chapter 3
"Changing the appearance of the terminal screen", Chapter 4



This group of options changes the color of foreground and background text in the Terminal screen. To change the color and pattern on the Desktop, go to the **Options/Desktop** menu.

Foreground

Default: White

This is the **foreground** color. The letters you see on your screen will be displayed in the selected color. To change the color, click the arrow on the right hand side of the list box and click on your selection.

Background

Default: Black

This is the **background** color, or the color of the screen behind the letters. To change the color, click the arrow on the right hand side of the list box, then click on your selection.

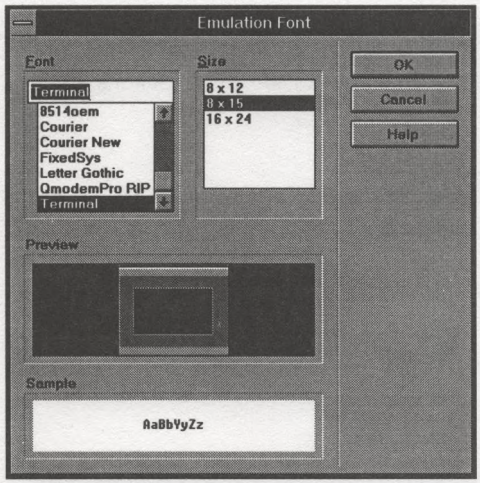
Sample text

The **Sample Text** view shows the foreground and background colors you have selected.

Emulation Font [dialog box]

Where: QmodemPro/Options/Emulation Options/Font

See Also: Desktop Options
Emulation Options
"Changing the Appearance of the Terminal Screen", Chapter 4



This dialog box allows you to change the Font and Size of the text displayed in the Terminal Screen. Note that only monospaced fonts are available for selection, including monospaced TrueType fonts.

Font

Default: Terminal

This is the name of the font to be displayed in the Terminal Screen.

Size

Default: 8 x 14

This is the size in pixels (height by width) of the font in the Terminal Screen. Larger numbers mean larger characters. You can see your results in the Preview and Sample windows.

Preview

The **Preview** window shows a sample of the dimensions of the terminal screen, relative to the desktop in the *QmodemPro* window. If the terminal screen will not fit in the desktop window with the selected font, arrows indicate that the screen actually extends beyond the limits of the *QmodemPro* desktop. Arrows may indicate the terminal screen is too large horizontally, vertically or in both directions.

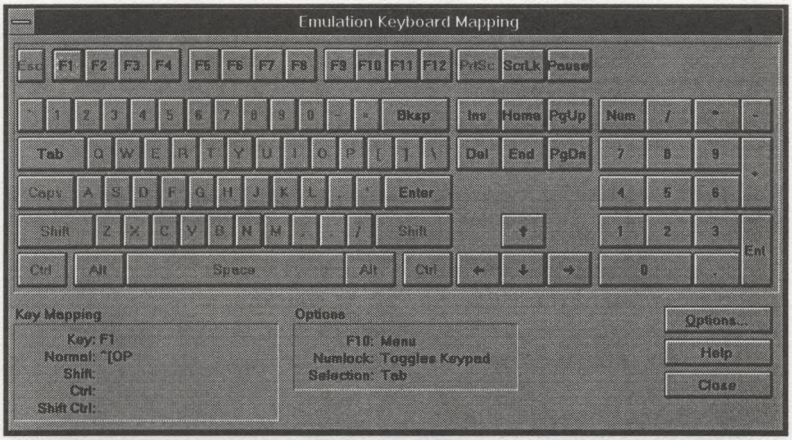
Sample

The **Sample** window shows the actual size and style of the typeface you've selected.

Emulation Keyboard Mapping [dialog box]

Where: QmodemPro/Options/Emulation Options/Keyboard

See Also: Edit Key
Keyboard Options
Emulation Options
Macro Keys
"Programmable Keys", Chapter 4



This dialog box allows you to add and change function key assignments, and key mappings. It shows a graphical representation of the keyboard, with certain keys selectable while others are grayed out and are not selectable. These selectable keys can be assigned text and internal *QmodemPro for Windows* commands.

To assign a command to a key, click on the key you want to change. The **Edit Key** dialog box will pop up prompting you enter the text for the normal, shift, control and control+shift positions for the key.

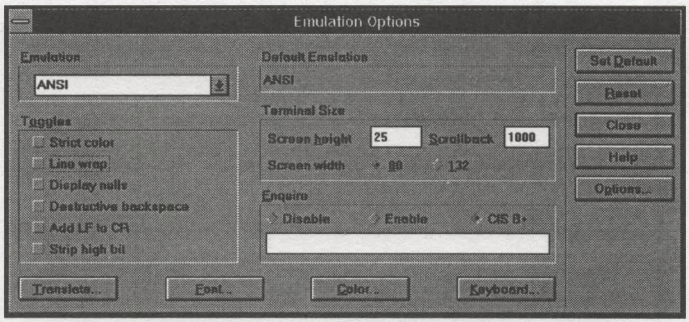
Options ...

The **Options** button pops up the **Keyboard Mapping Options** dialog box.

Emulation Options [dialog box]

Where: QmodemPro/Options/Emulations

See Also: Phonebook
Emulation
Select Font
Translation
Emulation Color
Emulation Keyboard Mapping
RIPscrip Options
"Changing the appearance of the terminal screen", Chapter 4
"Emulations", Chapter 3
"Programmable Keys", Chapter 4



The Terminal Emulation feature allows *QmodemPro for Windows* to behave like a terminal other than a standard PC display, for example the VT100 from Digital Equipment Corp. While in terminal emulation mode, *QmodemPro* interprets keyboard and video information so that it is displayed properly on the PC screen as if it were a native terminal of the

specified type. Note that terminal emulations can also be specified for individual phonebook entries.

Emulation

This is a list box which you can open by clicking on the arrow symbol. Select the emulation you wish to edit by positioning the mouse cursor over the desired item, then click the left mouse button.

The rest of the options in this dialog box are applied *only* to the selected emulation.

Toggles

Strict color

Default: OFF

In ANSI and VT100 emulation, there is a question on how the default colors should be set. Both ANSI and VT100 use the Esc[m and Esc[0m command to reset to a color. By the books, this color is white on black. In the past, these Esc codes were set to whatever the default Screen Text color was, as set in the color configuration section. But, depending on the system called, this may result in an incorrect display of either ANSI or VT100 if the designer relied on the white on black colors.

Strict Color will control what color is selected when Esc[m or Esc[0m is executed. When set **on**, the color becomes white on black. When set **off**, it becomes the color set by **Emulation color** under **Emulation Options/Color**. To remain compatible with previous versions of *Qmodem-Pro*, the default is **off**.

Line wrap

Default: ON

This controls how the cursor reacts when it writes a character in the last column on the screen (usually column 80). When set **on**, the cursor moves the next line down, performing a Line Feed if the cursor was on the last

line on the screen. When set **off**, the cursor writes the character in the last column, but does *not* advance to the next line.

Display nulls

Default: OFF

This controls how the NULL (0x00) character is handled when received. If this is set **on**, then the Null character is displayed as a Space. When set **off**, the NULL is stripped from the incoming screen.

Because the Translation tables allow stripping characters by changing them to NULL, this only affects the NULL character before translation. Any other character set to a NULL by input translation will be stripped and not be displayed. The only time you might want this to be set **on** is if you wanted to use the ASCII download to capture ALL incoming characters to a file.

Destructive backspace

Default: OFF

This controls whether or not the character to the left of the cursor is erased when a Backspace character (^H) is received. When **on**, the character is erased before the cursor is moved to the left. When **off**, the cursor moves leaving the character to the left untouched.

Add LF to CR

Default: OFF

Different kinds of computers use different characters to indicate a line ending. The IBM PC and compatible machines use two characters, a Carriage Return and a Line Feed, to end a line and move to the beginning of the next line. Some other computers, however, use only a Carriage Return, with no line feed.

If each line of text in terminal overwrites the previous line, rather than displaying on the next line of the screen, try setting this to **on**.

Strip high bit

Default: OFF

This option allows you to connect to a 7-bit system or service with 8-bits selected. Normally when you connect to a 7-bit system, the high bit is set (turned **on**) by the hardware on the receiving end. The high bit is then interpreted by the software as a meaningful bit when it really is not meaningful.

This toggle turns the stripping of the high-bit **on** and **off**. *QmodemPro for Windows* starts in 8-bit mode by default. This can be changed with a Script command to automate high-bit stripping, for example when calling CompuServe. Some BBSs use fancy graphics and symbol characters. To display these properly, 8 bit mode *must* be in effect.

Default emulation

Displays the default emulation. Use the **Set Default** button to make the highlighted emulation the default.

Terminal Size

Screen height

Default: 25

Change this value to make your screen taller or shorter.

Screen width

Default: 80

Select 132 columns, if the remote host supports this mode, to make your screen wider.

Enquire

Some host systems send an **Enquiry** (ENQ or ^E) sequence to determine the terminal type. These options allow you to determine whether to re-

spond to an ENQ from the host and what your system's response should be.

Disable/Enable/CIS B+

Default: CIS B+

The **Enquire Sequence** is used in various ways, most commonly to start a CIS B+ download automatically. Select **Enable** to allow *QmodemPro for Windows* to send the **Enquire Sequence** or Answerback in response to an ENQ signal.

Enquire Sequence

Default: BLANK

Fill in this field with the Enquire Sequence expected by the host. If you are unsure whether or what to send, consult the system administrators for the host you will be calling.

Set Default

Allows you to select the default emulation for the terminal window and new phonebook entries. This is the emulation that takes effect when you start *QmodemPro for Windows*. Use the **Terminal/Emulations** menu to change terminal emulations during a session.

Reset

Restores the curernt emulations settings to the default. This includes keyboard mappings, translation tables, font, and color.

Translate ...

Opens the **Emulation Translation Table** dialog box, allowing you to view and edit incoming and outgoing character translations. Translations are stored separately for *each* emulation.

Font ...

Opens the **Emulation Font** dialog box, allowing you to view and change the style and size of the characters displayed in the Terminal Window. Note that only monospaced fonts are available for selection.

Color ...

Opens the **Emulation Color** dialog box, allowing you to change the foreground and background color of text in the Terminal Window.

Keyboard ...

Opens the **Emulation Keyboard Mapping** dialog box, allowing you to attach commands to function keys and other keys on your keyboard. Emulations such as VT100, ANSI, and others have default key assignments which you can modify from here.

Options ...

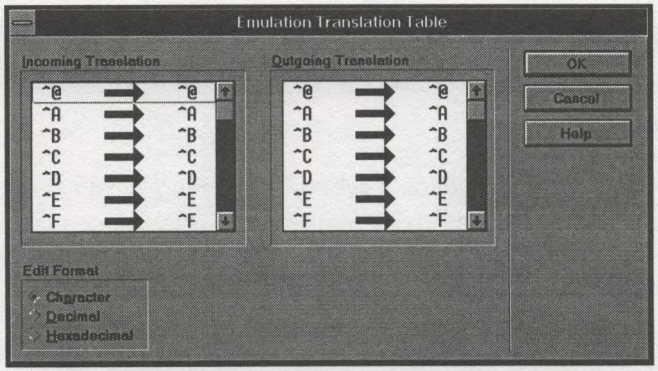
In ANSI emulation, opens the **ANSI Music** dialog box, allowing you to toggle ANSI music on and off.

In RIPscrip emulation, opens the **RIPscrip Options** dialog box, allowing you to select TrueType fonts and flood fill modes for RIPscrip emulation only.

Emulation Translation Table [dialog box]

Where: QmodemPro/Options/Emulation Options/Translate

See Also: Emulation Options
"Character Translation", Chapter 4



Translation may be necessary when communicating with another computer whose ASCII codes (the computer's alphabet) do not match those used by your PC. There are 256 ASCII characters, ranging in value from 0 to 255.

To change (translate) an incoming or outgoing ASCII value, double-click on the character you wish to change, and enter the new value in the dialog box which pops up.

Incoming Translation
Outgoing Translation

The Incoming Translation table controls which incoming characters are passed unchanged and which are translated to other characters, while the Outgoing Translation table controls which characters are sent out your modem to the other system.

Incoming or Outgoing tables are list boxes containing all 256 characters in the ASCII character set from 0 through 255 and their respective translations.

Edit Format

Default: Character

The display mode depends on which option in the **Edit Format** box is checked: ASCII, Decimal or Hexadecimal. In ASCII format, the characters are displayed as text. In Decimal format, characters are represented by their ASCII character number in decimal. In Hex format, the characters are represented by their ASCII character numbers in Hexadecimal (base 16) format.

Some characters cannot be entered from the keyboard, but can be entered as their decimal or hex equivalents.

Emulations ... [menu command]

Where: QmodemPro/Options

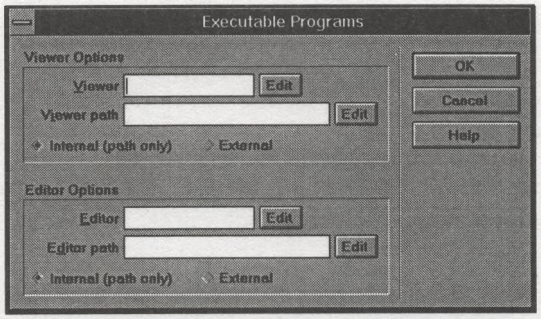
See Also: Phonebook
Emulation
Emulation Font
Emulation Translation Table
Emulation Color
Emulation Keyboard Mapping
RIPscrip Options
"Changing the appearance of the terminal screen", Chapter 4
"Emulations", Chapter 3
"Programmable Keys", Chapter 4

Opens the **Emulation Options** dialog box, allowing you to edit terminal emulation settings such as Emulation Keyboard Mapping, color, translation, and more.

Executable Programs [dialog box]

Where: QmodemPro/Options/Files/Executable Programs

See Also: View a File
Edit a File
"Viewing Files", Chapter 3
"The Editor", Chapter 4



This selection allows you to define your choices for internal or external File Viewer and Text Editor. In all cases, you can use the **Edit** button to pop up a common dialog box allowing you to browse file names, paths and drives for your selection.

Viewer Options

Viewer

You have the option to replace the internal viewer with an external viewer of your own, if you prefer. Only file viewers for Windows can be used here.

Viewer Path

This is the default Path passed to the viewer program, where it should look for files to load. Depending on how the viewer is invoked, a filename may

be appended to this path. This is *not* where your external viewer program is located.

Internal (path only)

Selecting Internal (Path Only) will use the Internal Viewer. The (Path Only) means that only the Path specified will be used, and the external program specified will be ignored. Selecting External will use the external viewer specified and the above path as the default.

External

Select this option to activate the external viewer defined in the Viewer text box.

Editor Options

Editor

You have the option to replace the internal editor with an external editor of your own, if you prefer. Editors for both Windows and DOS can be used here.

Editor Path

This is the default Path passed to the editor program, where it should look for files to load. Depending on how the editor is invoked, a filename may be appended to this path. This is *not* where your external editor program is located.

Internal (path only)

Selecting Internal (Path Only) will use the Internal Editor. The (Path Only) means that only the Path specified will be used, and the external program specified will be ignored. Selecting External will use the external editor specified and the above path as the default.

External

Select this option to activate the external editor defined in the Editor text box.

Exit [menu command]

Where: QmodemPro/File
File Viewer/File
GIF Viewer/File
Text Editor/File
Phonebook/File
Fax Viewer/File

Closes the current window or application. In the **QmodemPro** window, a warning box will pop up if you are on line when you select the **Exit** command.

Fax ... [menu command]

Where: QmodemPro/Options

See Also: Fax Preferences
Fax Receive Log
Fax Send
Fax Viewer Window

This command pops up the **Fax Preferences** dialog box. The Fax options determine the appearance, arrangement and content of Faxes sent by *QmodemPro for Windows*. Normally, a Fax consists of a cover sheet identifying the sender and addressee, plus the actual text or graphic file being sent.

Fax [menu]

Where: QmodemPro/Main Menu

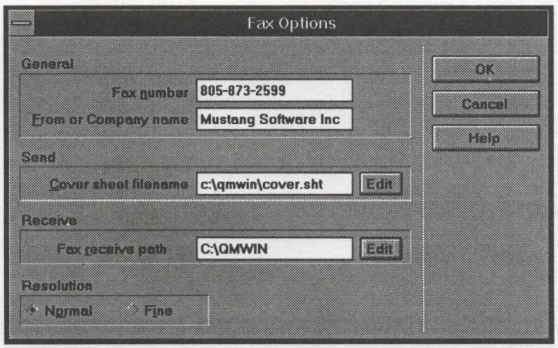
See Also: Fax Preferences
Fax Receive Log
Fax Send
Fax Viewer Window

From this menu, you can **Send, Receive**, or **Auto Receive** Fax messages, and view the Fax **Receive Log**.

Fax Options [dialog box]

Where: QmodemPro/Options/Fax

See Also: Fax Receive Log
Fax Send
Fax Viewer Window
"Sending and Receiving Fax Message", Chapter 3



Fax number

This is your Fax telephone number. This is placed at the top of each page in small print, and is also extracted from the @FROMPHONE@ Fax Vari-

able for use in a custom cover sheet. Leave this blank if you do not want to display your phone number.

From or Company Name

Put your company name or other identifying text here. This is placed at the top of each page in small print, and is also extracted from the @FROM@ Fax Variable for use in a custom cover sheet. Leave this blank if you do not want to display your name.

Cover sheet filename

Default: C:\qmwin\cover.sht

This is the name and path of the ASCII file you want to send as your cover sheet. Use the **Edit** button to browse and select from other drives, paths and file names. See the examples in Chapter 3 for creating a custom cover sheet.

Fax receive path

Default: C:\qmwin\fax

This is the directory into which *QmodemPro for Windows* will place incoming Fax messages. Fax messages are stored as files which you can view and print from the Fax Viewer window. Use the **Edit** button to browse and select from other drives and paths.

Resolution Normal/Fine

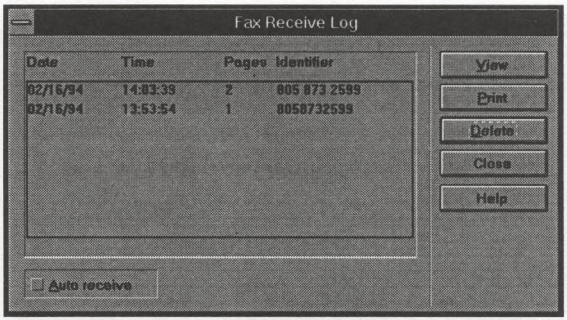
Default: Normal

Two resolution modes are supported, Normal and Fine. They correspond to the "Normal" (200x100 dpi) and "Fine" (200x200 dpi) settings on your Fax device. Fine resolution looks better, but takes longer to transmit.

Fax Receive Log [dialog box]

Where: QmodemPro/Fax/Receive Log
QmodemPro/Fax/Auto Receive

See Also: Fax Send
Fax Viewer Window
"Sending and Receiving Fax Message", Chapter 3



The Fax Receive Log lists incoming Fax messages, and allows you to view, print, or delete messages.

Date

This is the date the Fax message was received by *QmodemPro for Windows*, and is included in the header information in every Fax message.

Time

This is the time the Fax message was received by *QmodemPro for Windows*, and is included in the header information in every Fax message.

Pages

This is the number of pages in the Fax message received, and is included in the header information in every Fax message.

Identifier

This is normally the telephone number of the Fax machine which sent the Fax message.

View ...

This button opens the **Fax Viewer** window, displaying the selected Fax on screen in a variety of modes.

Print ...

This button prints the Fax highlighted in the Receive Log window.

Delete

Use the **Delete** button to delete the highlighted Fax message from your disk.

Auto Receive

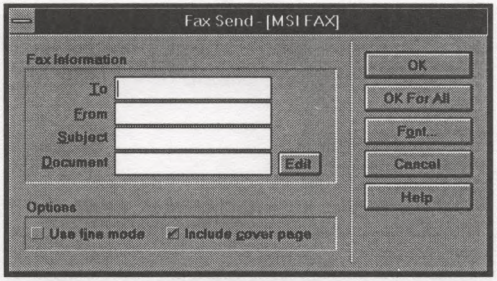
Default: OFF

Turn this option **on** if you would like *QmodemPro for Windows* to receive incoming Fax messages automatically. When this box is checked, the phone will be answered in Fax Receive mode and the incoming Fax documents will be stored on your disk for review in the **Fax Viewer.** In order for Auto Receive to remain active, the **Fax Receive Log** dialog must remain open on screen. Closing the log stops Auto Receive.

Fax Send [dialog box]

Where: Phonebook/Dial [for entries tagged as "Fax Only"]

See Also: Phonebook
"Sending and Receiving Fax Messages", Chapter 3



This dialog box pops up when you dial a Phonebook entry marked "Fax Device Only", and prompts you for the information *QmodemPro for Windows* needs to send a Fax message from the Phonebook.

Fax Information

The following information is used to fill in Fax Variables in the cover sheet. A complete list of Fax Variables can be found in Chapter 3, in the section beginning "Sending and Receiving Fax Messages".

To

The name of the person to whom the Fax is addressed. This is placed in the @TO@ Fax Variable.

From

Your name, or the name you want the Fax to be from. This is placed in the @FROM@ Fax Variable.

Subject

The subject of the Fax message. This is placed in the @SUBJECT@ Fax Variable.

Document

The name and path of the document to send. Use the **Edit** button to browse other filenames, paths and drives. Documents can be plain ASCII text, .PCX files or Windows Bitmap .BMP files.

Options

Use fine mode

Default: OFF

Two resolution modes are supported, Normal (200 x 100 dpi) and Fine (200 x 200 dpi). settings for your Fax device. Faxes sent in **fine mode** take longer to send.

Include cover page

Default: OFF

Turn this option **on** to send the cover page defined in **Options/Fax** before the selected document.

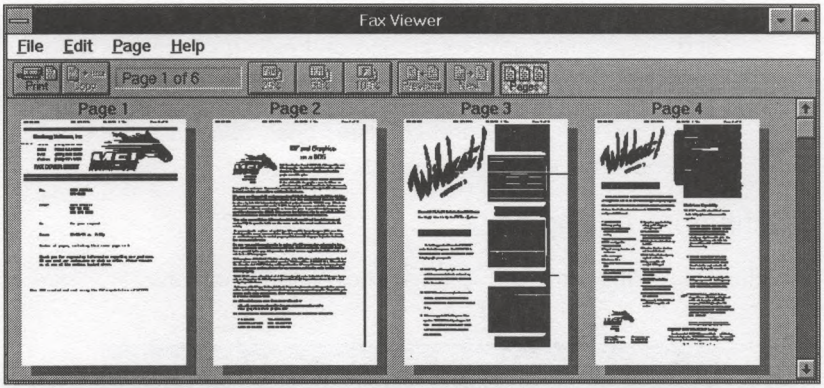
Font

Pops up the **Select Font** dialog box, allowing you to select the type style and size to use to send the text in your Fax messages. In contrast to the terminal window fonts, both monospaced (fixed-pitch) and proportional (variable-pitch) fonts can be selected here.

Fax Viewer Window

Where: Fax/Receive Log/View

See Also: Print
Print Setup
Copy
Zoom
"Sending and Receiving Fax Messages", Chapter 3



This window allows you to view and print incoming Fax messages, and copy a page to the Windows Clipboard as a graphic image.

File [menu]

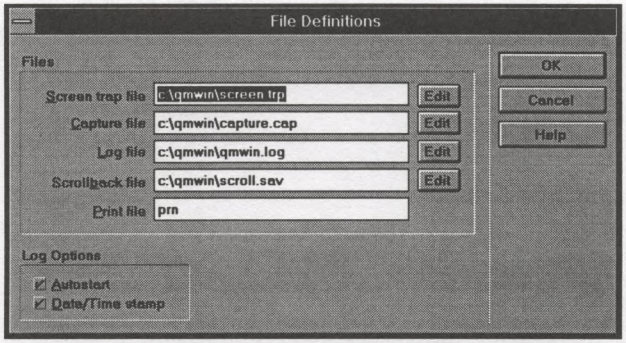
Where: QmodemPro/Main Menu
Phonebook/Main Menu
Fax Viewer/Main Menu
File Viewer/Main Menu
GIF Viewer/Main Menu
Text Editor/Main Menu

The File Menu contains commands related to file management. Depending on the window, you'll see commands for opening, closing, editing and viewing files, and for closing and exiting the current window.

For instance, the *QmodemPro* file menu has commands to Upload and Download files, View and Edit files, open and close the Capture and Log files, open a DOS Shell window, and more.

File Definitions [dialog box]

Where: QmodemPro/Options/Files/File Definitions



Screen Trap File

Default: SCREEN.TRP

This is the filename assigned to the screen trap or snapshot file. When you request a Screen Trap from the menu command **Edit/Screen to File**, you have the option to accept or change this path on a temporary basis before the file is saved.

Capture File

Default: CAPTURE.CAP

This is the filename assigned to the capture file. When you open a Capture File using the menu command **File/Capture** or by clicking the **Capture** button, you have the option to accept or change this path on a temporary basis before the file is saved.

Log File

Default: QMPRO.LOG

This is the filename assigned to the session log. When you open the Log File from the menu command **File/Log Toggle**, you have the option to accept or change this path on a temporary basis before the file is saved. You can start the log file automatically for each session by selecting **Auto Start Log** on the **Options/File Definitions** dialog box. See the Appendix at the end of this book for a list of Log File entries.

Scrollback File

Default: SCROLL.SAV

This is the filename assigned to the scrollback buffer when it is copied to disk. The scrollback buffer stores incoming data for review. When you save the Scrollback buffer, you have the option to accept or change this path on a temporary basis before the file is saved.

Print File

Default: PRN

This the default print device. This can be a printer port, such as PRN, LPT1, or LPT2, or it can be a file on disk, allowing printer output to be re-directed to a file. The default PRN sends all printer output to the printer at LPT1. The Windows printer drivers will automatically format the print output for your selected printer.

Autostart Log

Default: OFF

When this option is **on**, *QmodemPro for Windows* automatically records activity in the Log file (defined above, under **Options/Files**). When this option is **off**, the Log file can be turned on manually from the File menu.

Date/Time Stamp Log

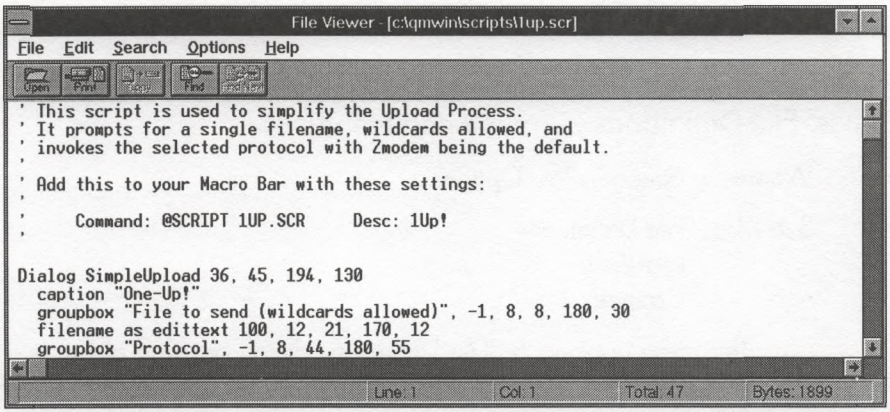
Default: ON

When this option is **on**, the Screen Trap, Capture and Scrollback files have time and date stamp headers placed before the appended data. Note that this time stamp appears when the file is opened, and in the case of the Log file, with each line added to the file.

File Viewer Window

Where: QmodemPro/File/View a File

See Also: Edit a File
View a GIF File
"Viewing a File", Chapter 3


File Viewer - [c:\qmwin\scripts\1up.scr]
File Edit Search Options Help
Open Print Copy Find Find Next
' This script is used to simplify the Upload Process.
' It prompts for a single filename, wildcards allowed, and
' invokes the selected protocol with Zmodem being the default.
'
' Add this to your Macro Bar with these settings:
'
'   Command: @SCRIPT 1UP.SCR   Desc: 1Up!
'
Dialog SimpleUpload 36, 45, 194, 130
  caption "One-Up!"
  groupbox "File to send (wildcards allowed)", -1, 8, 8, 180, 30
  filename as edittext 100, 12, 21, 170, 12
  groupbox "Protocol", -1, 8, 44, 180, 55
Line: 1 Col: 1 Total: 47 Bytes: 1899

The **File Viewer** allows you to see the contents of a text or binary file. The normal view is text, and all characters are displayed on screen. The File Viewer will optionally display binary files in hexadecimal mode, with the hex value of each character displayed in the first column on the screen, with the corresponding printable text characters displayed in the right-hand column.

The file viewer window is a standard window, with a menu bar, tool bar and, at the bottom of the window, a status line showing the position of the cursor by line and column number, the total number of lines in the current file, and the number of bytes in the current file.

Files: Executable Programs ... [menu command]

Where: QmodemPro/Options

See Also: Executable Programs
View a File
Edit a file

This menu pops up the **Executable Programs** dialog box and allows you to substitute your own file viewer and editor programs in place of the ones provided with *QmodemPro for Windows*.

Files: File Definitions ... [menu command]

Where: QmodemPro/Options

See Also: File Definitions
Log View
Capture

This menu pops up the **File Definitions** dialog box and allows you to assign default file names for files automatically recorded by *QmodemPro for Windows*.

Files: Path Definitions ... [menu command]

Where: QmodemPro/Options

See Also: Path Definitions
Upload
Download

This menu pops up the **Path Definitions** dialog box and lets you assign default paths for files used by *QmodemPro for Windows*.

Find ... [menu command, button]

Where: File Viewer/Search Menu + Tool Bar
Text Editor/Search Menu + Tool Bar
Phonebook/Search Menu + Tool Bar

See Also: Find Phonebook Entry
Find Text

The command pops up a **Find** dialog box and allows you to define the text to search for, and search options.

Find Next [menu command, button]

Where: File Viewer/Tool Bar
Phonebook/Search Menu + Tool Bar

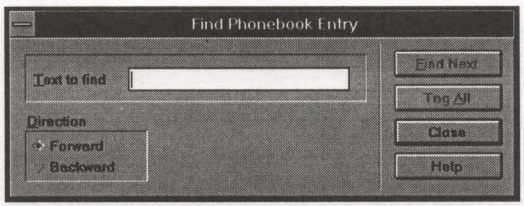
See Also: Find Phonebook Entry
Find Text
"Viewing a File", Chapter 3
"The Phonebook", Chapter 3

Continues the **search** operation, using the data already in the "Text to find" field in the **Find** dialog box.

Find Phonebook Entry

Where: Phonebook/Search/Find

See Also: Revise Phonebook Entry
"The Phonebook", Chapter 3



Searches for text in the Phonebook. All Phonebook entry fields are searched, including the text in a Note file attached to an entry (but not the contents of a script file), and the search is case insensitive.

Text to find

Enter the text you want to find in this window, up to a maximum of 27 characters.

Direction

Forward

Default: ON

Searches forward from the cursor, towards the end of the file.

Backward

Default: OFF

Searches backwards from the cursor, towards the beginning of the file.

Find Next

Continues the search operation, using the data already in the **Text to find** window.

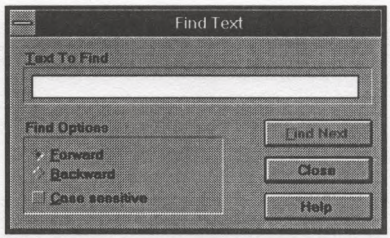
Tag All

Tags all Phonebook entries with text matching the **Text to Find**.

Find Text (File Viewer) [dialog box]

Where: File Viewer/Search/Find

See also: File Viewer
"Viewing a File", Chapter 3



Searches for text in the current file loaded in the File Viewer window.

Text to find

Enter the text you want to find in this window, up to a maximum of 80 characters.

Find options

Forward

Default: ON

Searches forward from the cursor, towards the end of the file.

Backward

Default: OFF

Searches backwards from the cursor, towards the beginning of the file.

Case sensitive

Default: OFF

When toggled **on**, finds only text which matches the capitalization of the search text exactly.

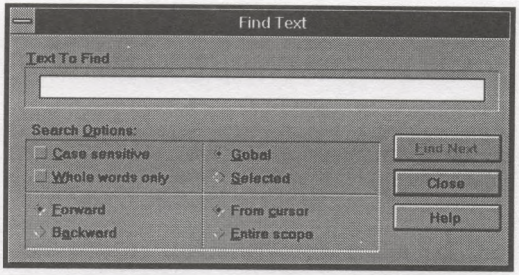
Find Next

Continues the search operation, using the data already in the **Text to find** window.

Find Text (Text Editor) [dialog box]

Where: Text Editor/Search/Find

See Also: Replace
"The Text Editor", Chapter 4



Searches for text in the Text Editor window.

Text to find

Enter the text you want to find in this window, up to a maximum of 80 characters.

Search options

Case sensitive

Default: OFF

When toggled **on**, finds only text which matches the capitalization of the search text exactly.

Whole words only

Default: OFF

When toggled **on**, the search finds only complete words matching the search text. For instance, if you are searching for "fish" in text that reads:

```
The fishermen reported very good fishing today. They
caught many fine fish.
```

the words "fishermen" and "fishing" would be skipped, but the word "fish" would be found and highlighted.

Forward

Default: ON

When **on**, searches forward from the cursor, towards the end of the file. If **Entire Scope** is selected, the search starts at the beginning of the file.

Backward

Default: OFF

When **on**, searches backwards from the cursor, towards the beginning of the file. If **Entire Scope** is selected, the search starts at the beginning of the file.

Global

Default: ON

If **on**, searches the entire document for the find text.

Selected

Default: OFF

If **on**, searches only within marked text.

From cursor

Default: ON

If **on**, searches forward or backward from the cursor location.

Entire scope

Default: OFF

If **on**, searches the entire document from the beginning or end of the file.

Find Next

Continues the search operation, using the data already in the **Text to find** window.

Fine Tune ... [menu command, button]

Where: QmodemPro/Device Menu + Tool Bar

See Also: Device Settings
Options
"Devices", Chapter 3
"Fine Tuning", Chapter 3

The **Fine Tune** menu pops up the **Device Settings** dialog box allowing you to make temporary changes to the current device configuration. This dialog box has options to change baud rate, parity, stop bits, and data bits.

Font ... [menu command]

Where: File Viewer/Options
Text Editor/Options

See Also: View a File
Edit a File
"Viewing a File", Chapter 3
"The Text Editor", Chapter 4

Pops up the **Select Font** dialog box, which allows you to change the type face, style and size of the text in the File Viewer or Text Editor window.

Full Duplex [menu command]

Where: QmodemPro/Device

See Also: Device Connection

Duplex describes the method used to display your keystrokes on the terminal screen. In Full Duplex mode, the host system echoes your keystrokes back to you. In Half Duplex mode, the host system does not echo your keystrokes, so *QmodemPro for Windows* must do it instead.

A check mark appears beside this menu selection when Full Duplex is toggled **on**.

Full Screen [menu command]

Where: GIF Viewer/View

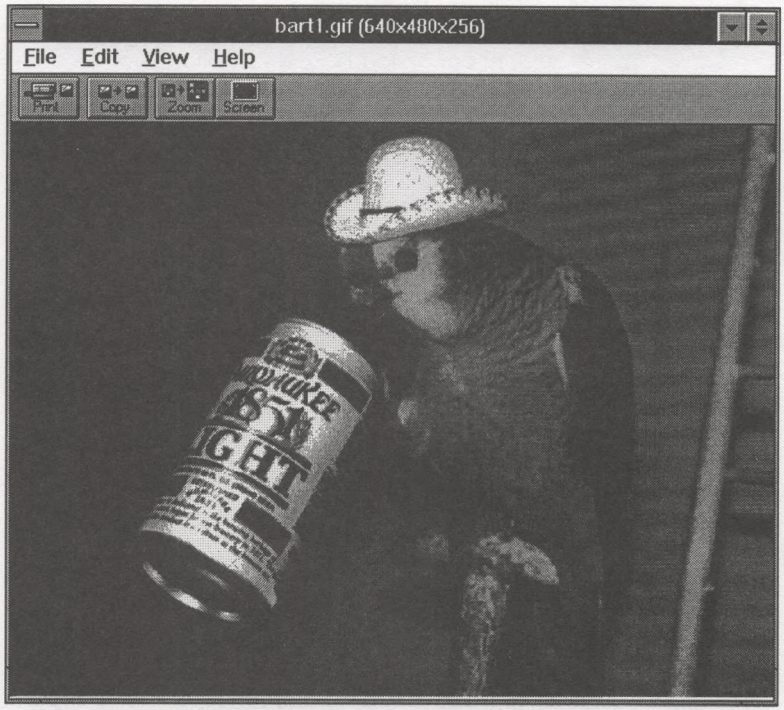
See Also: Screen

Expands the GIF viewer window to full screen. Click anywhere on the screen to restore the window to its previous dimensions.

GIF Viewer Window

Where: QmodemPro/File/View a GIF file
Download (when the file extension is .GIF)

See Also: Protocol Options
"Viewing A File", Chapter 3



This window allows you to view and print GIF and BMP graphic files, and copy a page to the Windows Clipboard as a graphic image. Refer to Chapter 3 for more information on viewing GIF files.

Goto Entry ... [menu command]

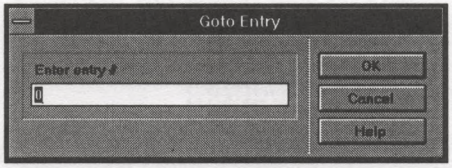
Where: Phonebook/Search

Pops up a the **Goto Entry** dialog box, allowing you to go directly to a phonebook entry if you know the entry number in the phonebook file.

Goto Entry [dialog box]

Where: Phonebook/Search/Goto Entry

See Also: Phonebook

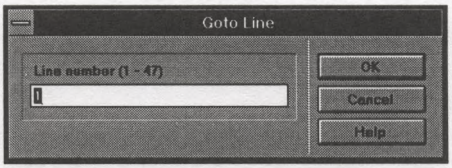


Moves the selection to the phonebook entry specified in the **entry number** field in this dialog box.

Goto Line [dialog box]

Where: File Viewer/Search/Goto Line
Text Editor/Search/Goto Line

See also: Search



Default: Current Line

Moves the cursor to the beginning of the line specified in the **line number** field in this dialog box. The current cursor position is shown in the status line at the bottom of the File Viewer window.

Goto Line ... [menu command]

Where: File Viewer/Search
Text Editor/Search

See Also: Search

Pops up the **Goto Line** dialog box, allowing you to go directly to the specified line number in the file you're viewing or editing.

Group ... [menu command, button]

Where: Phonebook/File Menu + Tool Bar

See Also: Edit Group
Edit Groups

Pops up the **Edit Groups** dialog box, allowing you to tag and dial multiple Phonebook entries in a single pass.

Hangup [menu command, button]

Where: QmodemPro/Device Menu + Tool Bar

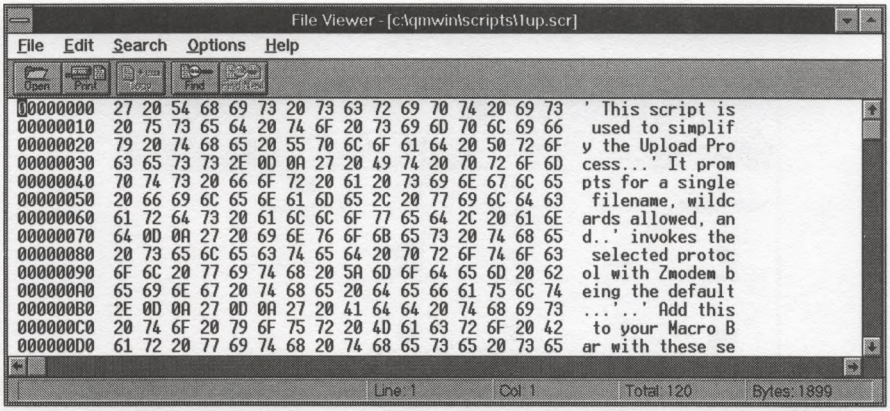
See Also: Device Modem

The Hang up command forces the modem to terminate a call. In most cases, you would *not* use this command to disconnect from the host computer; you would use the host computer's standard logoff procedure. However, in case you are experiencing problems such as remote computer lockup, or bad line noise, you may use this command to disconnect the call.

Hex mode [menu command]

Where: File Viewer/Options

See Also: File Viewer



Displays the hexadecimal (Hex) values of the characters in the current file.

Host Mode Script [menu command]

Where: QmodemPro/Scripts

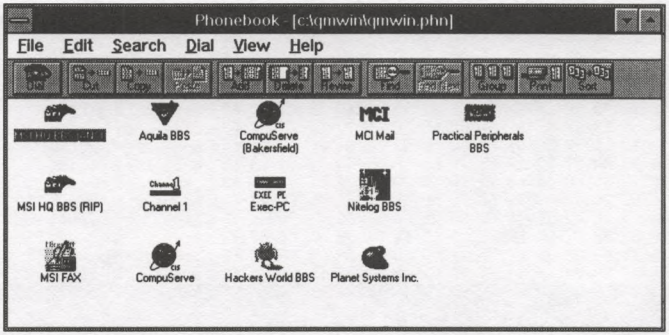
See Also: Chapter 5, The QmodemPro for Windows Host
Book 2, Script Reference

Loads and executes HOST.SCR, the *QmodemPro for Windows* Host mode. The Host mode allows you to receive incoming data calls as if it were a scaled-down Bulletin Board System. Callers can send and receive messages, and transfer files. See Chapter 5 for complete details.

Icon [menu command]

Where: Phonebook/View

See Also: Revise Phonebook Entry
Icon List
List

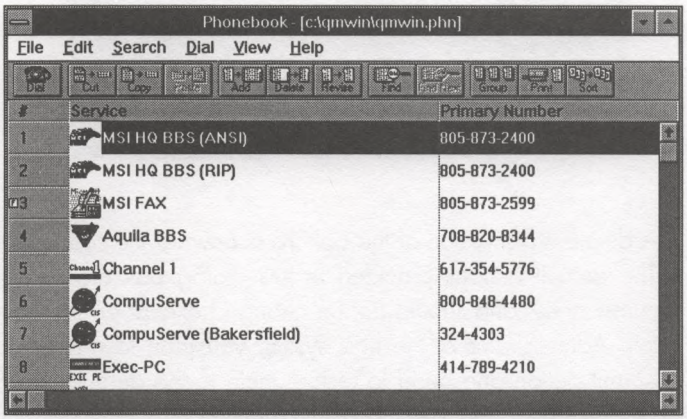


Lists Phonebook entries as Icons rather than text or text plus icons. Double clicking on an icon dials that entry.

Icon List [menu command]

Where: Phonebook/View

See Also: Revise Phonebook Entry
Icon
List


Phonebook - [c:\qmwin\qmwin.phn]
File Edit Search Dial View Help
Dial Cut Copy Paste Add Delete Revise Find Find Next Group Print Sort
Service Primary Number
1 MSI HQ BBS (ANSI) 805-873-2400
2 MSI HQ BBS (RIP) 805-873-2400
3 MSI FAX 805-873-2599
4 Aquila BBS 708-820-8344
5 Channel 1 617-354-5776
6 CompuServe 800-848-4480
7 CompuServe (Bakersfield) 324-4303
8 Exec-PC 414-789-4210

Lists Phonebook entries as Icons plus Text rather than Icons only or Text only. Double clicking on an icon or text entry dials that entry.

Insert Entry ... [menu command]

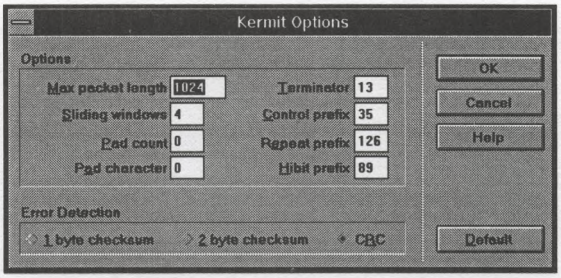
Where: Phonebook/File

See Also: Revise Phonebook Entry

Inserts a new entry in the phonebook above the currently highlighted entry. The **Revise Phonebook Entry** dialog box pops up. For more information on adding, inserting, and revising phonebook entries, see Chapter 3, *Using QmodemPro for Windows*.

Kermit Options [dialog box]

Where: QmodemPro/Options/Protocols/Kermit

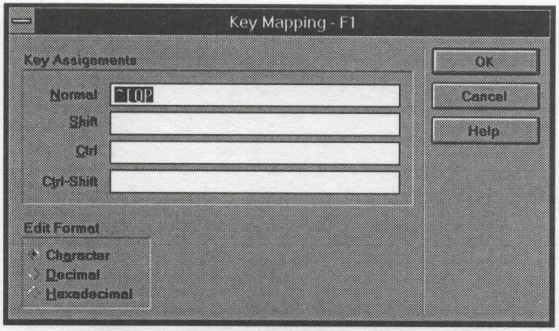


A detailed discussion of the options is beyond the scope of this document. The default options provided in this dialog box are correct for most circumstances, and should *not* be changed except on the advice of the System Administrator of the host system you plan to call. If you change the Kermit option and need to restore them to the defaults used by *QmodemPro for Windows*, select the Default button.

Key Mapping [dialog box]

Where: Options/Emulation Options/Keyboard

See Also: Macro keys
Desktop Options
Revise Phonebook Entry
"Programmable Keys", Chapter 4



This dialog box appears when you select a key for reassignment. Programmable keys can be used to send macro commands to *QmodemPro for Windows*, to run a script, or to send commands to the modem, or to send text to the remote host.

For instance, you can program a function key to send your UserID and Password to a BBS from the system's Phonebook entry, or change port and parity settings on the fly.

Key Assignments

To select a key for reassignment, highlight the desired key with the tab key or the mouse pointer, and click the left mouse button. A dialog box will pop up, allowing you to enter the text, macro or meta command for up to four shift levels: **Normal, Shift, Ctrl** and **Ctrl-Shift**.

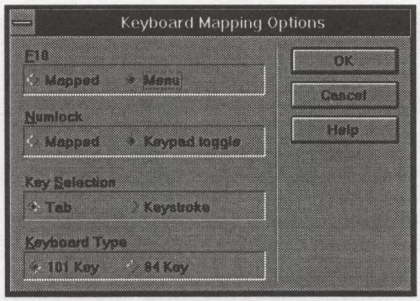
Edit Format

This set of option buttons allows you to enter your selection in character mode, decimal or hexadecimal.

Keyboard Mapping Options [dialog box]

Where: Emulation Keyboard Mapping

See Also: Emulation Options
Macro Keys



F10

By default, the F10 key activates the menu bar. If you prefer to re-assign this key, change the default from **Mapped** to **Menu**.

Numlock

By default, the NUM LOCK key toggles the numeric keypad. If you prefer to re-assign this key, change the default from **Keypad Toggle** to **Mapped**.

Key Selection

This option controls the behavior of the Keyboard window. If **Tab** is selected, you can select keys by pressing the ⇥ (tab) key to move from one keyboard button to the next. If **Keystroke** is selected, press the actual key on the keyboard you would like to edit.

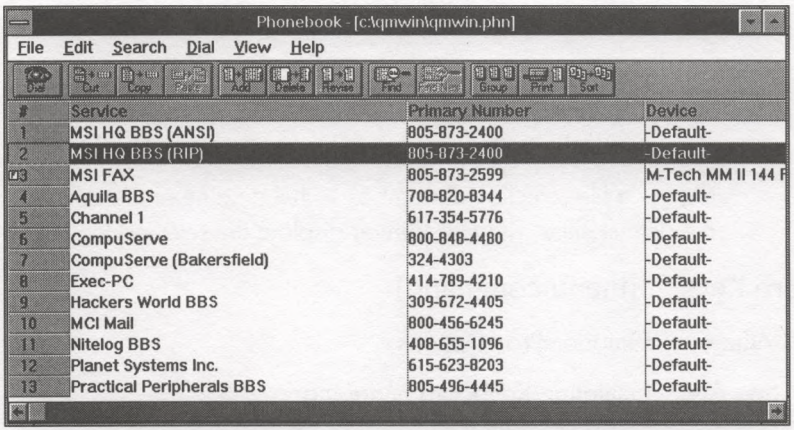
Keyboard Type

Change this option to display the keyboard layout most closely matching your own. Two options are available: **101-Key** and **84-Key**.

List [menu command]

Where: Phonebook/View

See Also: Revise Phonebook Entry
Icon List
Icon


Phonebook - [c:\qmwin\qmwin.phn]
File Edit Search Dial View Help
Dial Cut Copy Paste Add Delete Revise Find Group Print Sort
Service Primary Number Device
1 MSI HQ BBS (ANSI) 805-873-2400 -Default-
2 MSI HQ BBS (RIP) 805-873-2400 -Default-
3 MSI FAX 805-873-2599 M-Tech MM II 144 F
4 Aquila BBS 708-820-8344 -Default-
5 Channel 1 617-354-5776 -Default-
6 CompuServe 800-848-4480 -Default-
7 CompuServe (Bakersfield) 324-4303 -Default-
8 Exec-PC 414-789-4210 -Default-
9 Hackers World BBS 309-672-4405 -Default-
10 MCI Mail 800-456-6245 -Default-
11 Nitelog BBS 408-655-1096 -Default-
12 Planet Systems Inc. 615-623-8203 -Default-
13 Practical Peripherals BBS 805-496-4445 -Default-

Lists Phonebook entries as Text only. Double clicking on an entry dials that entry.

Log Toggle [menu command]

Where: QmodemPro/File

See Also: Capture
File Definitions

This command starts or stops the **Session Log**. The log is used to keep track of major *QmodemPro for Windows* activity, such as uploading and downloading, the names and numbers of systems you dialed, date and time of the call, and how long the on-line session lasted.

Log View [menu command]

Where: QmodemPro/File

See Also: Log Toggle
File Viewer
File Definitions

Opens a file selection dialog box with the name of the defined log file as the default entry. The **File Viewer** displays the selected log file.

Macro Keys ... [menu command]

Where: QmodemPro/Options

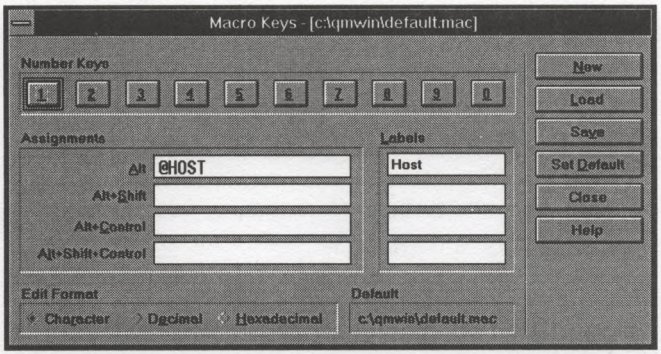
See Also: Emulation Keyboard Mapping
Desktop Options
"Programmable Keys", Chapter 4

Opens the **Macro Keys** dialog box, allowing you to assign macros and commands to the numeric keys in the ALT, ALT SHIFT, ALT CTRL and ALT SHIFT CTRL positions.

Macro Keys [dialog box]

Where: QmodemPro/Options/Macro Keys

See Also: Emulation Keyboard Mapping
Revise Phonebook Entry
Desktop Options
"Programmable Keys", Chapter 4



Keys 1 - 0

These buttons correspond with the number keys along the top row of your keyboard. These keys in the various alternate positions can store macros and commands. They also appear at the bottom of the *QmodemPro* window for easy selection. The leftmost button on the Macro Bar indicates the shift state: A, AS, AC, ASC for ALT, ALT SHIFT, ALT CTRL, or ALT SHIFT CTRL.

Assignments

To edit a macro key, highlight the desired key with the mouse pointer, and click the left mouse button. In the **Assignments** window, enter the text, macro or meta command for up to four shift levels: ALT, ALT SHIFT, ALT CTRL and ALT SHIFT CTRL.

Refer to Chapter 4 for a list of macro commands, and some example macros.

Labels

Enter the text you would like to use as a label for the macro key you are editing. These labels are displayed in the buttons on the Macro bar at the bottom of the *QmodemPro* window.

Labels must fit on the Macro Bar keys and are limited in length, depending on the characters you use and the size of your terminal screen. Up to nine characters may be entered, but the number displayed may be limited. Check your labels to be certain they fit on your screen.

Edit Format

This set of option buttons allows you to enter your selection in character mode, decimal or hexadecimal.

Default

Macro key assignments can be saved in a macro file. This window shows the name of the current default macro file which is loaded when *QmodemPro for Windows* is started.

New

Clears all macro key definitions from the current dialog box so that you can edit and create a new macro file.

Load

Pops up a common dialog box allowing you to select a macro file to edit or use.

Save

Saves the macro key definitions in the dialog box to a macro file.

Set Default

This button sets the currently open macro file as the default. This is the set of Macro Keys in effect when you first start *QmodemPro for Windows*.

Close

Closes the Macro Keys dialog box. If you do not save your changes, the current macro key settings will only remain in effect until a new file is loaded, or until you exit *QmodemPro for Windows*.

Manual Dial ... [menu command]

Where: QmodemPro/Phonebook
Phonebook/Dial

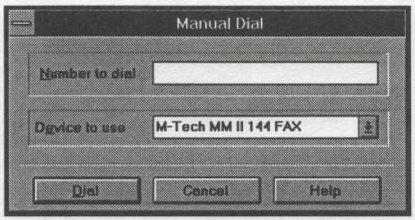
See Also: Phonebook

The **Manual Dial** command pops up the **Manual Dial** dialog box, allowing you to dial a number that is not in your Phonebook. Manual dial commands may contain up to 40 alphabetic or numeric characters.

Manual Dial [dialog box]

Where: QmodemPro/Phonebook/Manual Dial
Phonebook/Dial/Manual Dial

See Also: Phonebook



This dialog box allows you to enter a phone number for a manual dial. The data entered in the Manual Dial dialog box will be sent directly to the

modem as if it were an actual Phonebook entry. The number is not checked for validity.

Number to Dial

Enter the **telephone number** you want to dial in this window. To enter special control characters, refer to the section of Chapter 5, headed **Special Control Characters.**

Device to Use

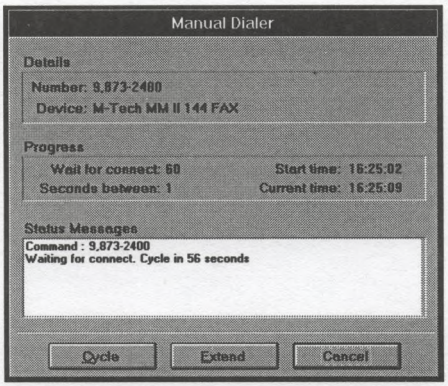
Select the **device** you would like to use from this list. The current device is the default. See the section on **Devices** in Chapter 3 for more information.

Dial

Click the **Dial** button to begin dialing. The **Manual Dialer** dialog box will pop up, showing you the progress of the current call.

Manual Dialer [dialog box]

Where: QmodemPro/Phonebook/Manual Dial/Dial
Manual Send Fax/Dial



The **Manual Dialer** dialog box displays the current status of the call being dialed.

Details

The **Details** window shows information about the entry currently being dialed. This information is extracted from the Manual Dial dialog box.

Progress

The **Progress** window shows the number of seconds to wait for a connection, the seconds between dialing attempts, the current time, and the start time for the current dialing attempt.

Status Messages

The **Status Messages** window shows a list of commands sent to the modem, responses from the modem, and connect messages. When a successful connection is established, the Dialer dialog box is replaced by the Terminal Screen, or the Fax Status dialog box, depending on the type of connection made.

Cycle

The **Cycle** button aborts the current dialing attempt and redials after pausing for the number of seconds shown in the **Seconds between** field in the Progress window.

Extend

Use the **Extend** button to extend the length of time *QmodemPro for Windows* will wait for a successful connection with the current entry. Use this if the **Wait for connect** counter is nearing zero and the system has not answered the phone or the modems have not yet established a connection.

Note that modems usually have an internal timer that may override the time extension. Refer to your modem manual for instructions on changing this internal setting.

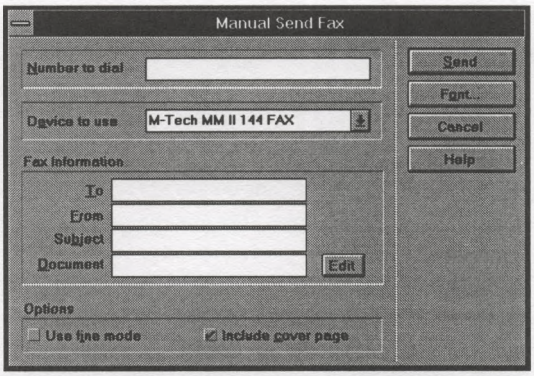
Cancel

The **Cancel** button aborts the current dialing attempt and closes the Manual Dialer dialog box.

Manual Send Fax [dialog box]

Where: QmodemPro/Fax/Send

See Also: Fax Send
"Sending and Receiving Fax Messages", Chapter 3



This dialog box prompts you for the information *QmodemPro for Windows* needs to send a Fax message manually.

Number to Dial

Enter the **telephone number** you want to dial in this window. To enter special control characters, refer to the section of Chapter 5, headed **Special Control Characters.**

Device to Use

Select the **device** you would like to use from this list. For more general information on devices, see Chapter 3, under **Devices.**

Fax Information

The following information is used to fill in Fax Variables in the cover sheet.

To

The name of the person to whom the Fax is addressed. This value is stored in the @TO@ Fax Variable, used in custom cover sheets.

From

Your name. This value is stored in the @FROM@ Fax Variable, used in custom cover sheets.

Subject

The subject of the Fax message. This information is stored in the @SUBJECT@ Fax Variable, for use in custom cover sheets.

Document ...

The name and path of the document to send. Use the **Edit** button to browse other filenames, paths and drives.

Font

Pops up the **Select Font** dialog box, allowing you to select the type style and size to use to send the text in your Fax documents.

Options

Use Fine Mode

Default: OFF

Two resolution modes are supported, Normal (200 x 100 dpi) and Fine (200 x 200 dpi). Faxes sent in **fine mode** look better but take longer to send.

Include Cover Page

Default: ON if cover page exists (see **Options/File Definitions**); **off** if no cover page found.

Turn this option **on** to send the cover page defined in **Options/Fax** before the selected document.

Send

Pops up the **Manual Dialer** dialog box and begins dialing the phone number entered in the **Number to Dial** field.

New [menu command]

Where: Text Editor/File

Clears the window and opens a new, untitled file for input and editing. You will be prompted to save any changes to the previous file you were working on before the old file is closed.

Next [button]

Where: GIF Viewer/Tool Bar

When multiple files have been selected in the **Open GIF file** dialog box, this button loads the next GIF picture into the Viewer for viewing.

Next Page [menu command]

Where: Fax Viewer/Page

See Also: Previous Page

Displays the next page of a multi-page Fax message.

Open ... (Phonebook) [menu command, button]

Where: Phonebook/File

See Also: Phonebook
Phonebook Options

This menu selection allows you to load a different phonebook file. A common dialog box will pop up allowing you to browse for file names, paths and drives.

Open ... [menu command, button]

Where: File Viewer/File Menu + Tool Bar
GIF Viewer/File Menu + Tool Bar
Text Editor/File Menu + Tool Bar

Opens a dialog box prompting you for the drive, path and name of the file you wish to **open** for viewing or editing.

Options [menu]

Where: QmodemPro/Main Menu
File Viewer/Main Menu
Text Editor/Main Menu

The main *QmodemPro for Windows* **Options** controls most of the configuration for the program. In other areas, the **Options** menu lists commands which change the way the current window looks and behaves. For instance, in the Text Editor, the Options menu allows you to select a font to display text in the window, turn **on** Wordwrap mode, and set the number of spaces to allocate to a tab character.

Pack [menu command]

Where: Phonebook/File Menu

This command removes deleted record space from the Phonebook file. Use this command to reduce the size of the Phonebook file on disk after you delete a large number of entries

Page [menu]

Where: Fax Viewer/Main Menu

See Also: Fax Viewer
Next Page
Previous Page
Zoom

This menu lists commands which page forward or backward in a multi-page Fax document, and enlarge or reduce the image in the window.

Paste [menu command, button]

Where: QmodemPro/Edit
Text Editor/Edit Menu + Tool Bar
Phonebook/File Menu + Tool Bar

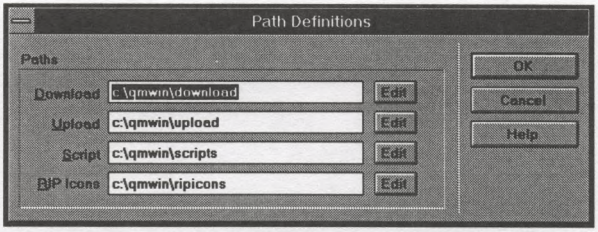
See Also: Cut
Copy
"The Phonebook", Chapter 3
"The Editor", Chapter 4

Copies the contents of the clipboard to the document, at the cursor location.

Path Definitions [dialog box]

Where: QmodemPro/Options/Files/Path Definitions

See Also: File/Download
File/Upload



Download

Default: C:\QMWIN\DOWNLOAD

This is the default path where *QmodemPro for Windows* will place files that you download from a host system. When you request a download, you have the option to accept or change this path on a temporary basis before the transfer begins.

Upload

Default: C:\QMWIN\UPLOAD

This is the default path which *QmodemPro for Windows* checks first for files when you request an upload. When you request an upload, you have the option to accept or change this path on a temporary basis before the transfer begins.

Script

Default: C:\QMWIN\SCRIPTS

This is the default path where *QmodemPro for Windows* checks for script files to compile or execute. When you request a script operation, you have the option to accept or change this path on a temporary basis before the operation begins.

RIP Icons

Default: C:\QMWIN\RIPICONS

This is the default path where *QmodemPro for Windows* checks for RIP icons. Individual phonebook entries can also have their own RIP icon paths.

Phonebook ... [menu command]

Where: QmodemPro/Options

See Also: Phonebook Options
Phonebook Window
"The Phonebook", Chapter 3

This menu command pops up the **Phonebook Options** dialog box, allowing you to specify the name and path of the default phonebook, and whether or not to open the Phonebook Window each time you start *QmodemPro for Windows*.

Phonebook [menu]

Where: QmodemPro/Main Menu

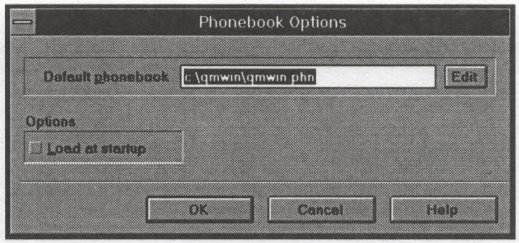
See Also: Revise Phonebook Entry
Dial
Manual Dial
Send Fax
"The Phonebook", Chapter 3

The commands on this menu allow you to open the Phonebook Window, or manually dial a phone number.

Phonebook Options [dialog box]

Where: QmodemPro/Options/Phonebook

See Also: Phonebook Window
"The Phonebook", Chapter 3



The **Phonebook Options** dialog box allows you to specify the default name and path of the phonebook *QmodemPro for Windows* should use, and whether or not to open the Phonebook Window automatically when the program is started.

Default phonebook

Default: C:\QMWIN\QMWIN.PHN

Enter the name of the default phonebook file here, or use the **Edit** button to browse file names, paths and drives.

Load at startup

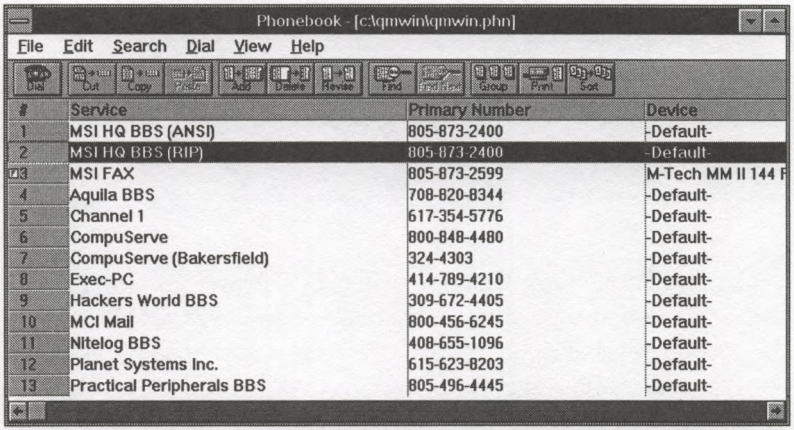
Default: OFF

If **on**, opens the Phonebook window automatically when *QmodemPro for Windows* is started.

Phonebook Window

Where: QmodemPro/Phonebook
QmodemPro/Dialer

See Also: Phonebook Options
"The Phonebook", Chapter 3


Phonebook - [c:\qmwin\qmwin.phn]
File Edit Search Dial View Help
Dial Cut Copy Paste Add Delete Revise Find Find First Group Print Sort
Service Primary Number Device
1 MSI HQ BBS (ANSI) 805-873-2400 -Default-
2 MSI HQ BBS (RIP) 805-873-2400 -Default-
3 MSI FAX 805-873-2599 M-Tech MM II 144 F
4 Aquila BBS 708-820-8344 -Default-
5 Channel 1 617-354-5776 -Default-
6 CompuServe 800-848-4480 -Default-
7 CompuServe (Bakersfield) 324-4303 -Default-
8 Exec-PC 414-789-4210 -Default-
9 Hackers World BBS 309-672-4405 -Default-
10 MCI Mail 800-456-6245 -Default-
11 Nitelog BBS 408-655-1096 -Default-
12 Planet Systems Inc. 615-623-8203 -Default-
13 Practical Peripherals BBS 805-496-4445 -Default-

The **Phonebook Window** controls functions such as adding, editing, finding, tagging and dialing Phonebook entries, creation of groups, and sending Faxes. See Chapter 3 for a detailed explanation of the Phonebook.

Previous [button]

Where: GIF Viewer/Tool Bar

Loads the previous GIF picture file back into the GIF viewer for viewing.

Previous Page [menu command]

Where: Fax Viewer/Page

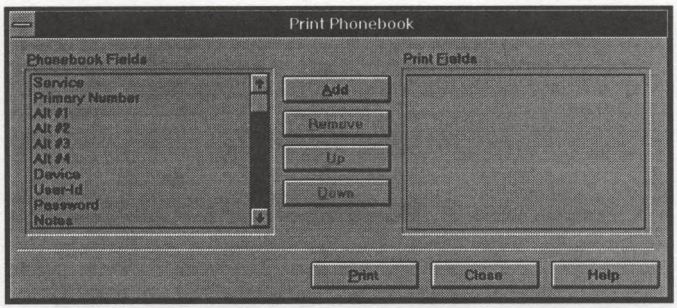
See Also: Next Page

Displays the previous page of a multi-page Fax message.

Print Phonebook [dialog box]

Where: Phonebook/File/Print

See Also: "The Phonebook", Chapter 3



The Print menu allows you to format and print selected information from the current Phonebook. All Phonebook entries are printed. The Print Phonebook dialog box lists the available fields in a window on the left, and the selected fields in a window on the right.

To select a field to print, highlight the desired information with the mouse pointer, and click the left mouse button.

To add the field to the list, use the **Add** button or double-click on an entry. Use the **Up** and **Down** buttons on a selected field to change its position in the **Print fields** list. Use the **Remove** button or double-click on an entry to delete a field from the list.

When you are satisfied with your selections, use the **Print** button to begin printing.

Printer Toggle [menu command, button]

Where: QmodemPro/File Menu + Tool Bar

See Also: Capture
File Definitions

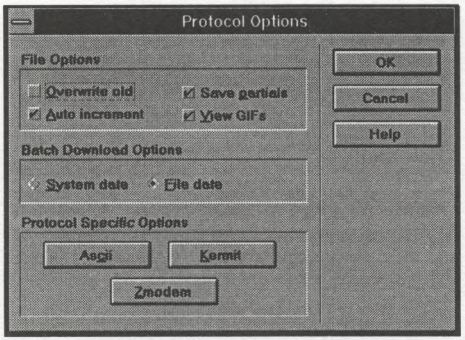
Default: Off

This is a simple **on-off** selection. When the **printer** is toggled **on**, data is sent to the currently selected printer in Windows as well as to the terminal window. When it is toggled **off**, data is sent to the terminal window only.

Protocol Options [dialog box]

Where: QmodemPro/Options/Protocols

See Also: Upload
Download
Revise Phonebook Entry
Zmodem Options
Kermit Options
ASCII Options
CIS B+ Options
"Uploading and Downloading Files", Chapter 3



This section allows you to customize some options and toggles **on** the internal protocols.

Some file transfer protocols offer configuration options in addition to the general options discussed below. Each protocol button opens a dialog box allowing you to customize your settings.

The default settings established for each protocol are the recommended ones for most circumstances, and unless there is a clear reason to make changes, these settings should be left alone.

File Options

Overwrite old

Default: OFF

Auto increment

Default: ON

The **Overwrite old** and **Auto increment** toggles work in tandem to control how downloaded files are treated. When you are prompted for a filename in one of the download protocols, a check is made to see if the file already exists. If it does, the Auto-Increment flag is checked. If it is set **on**, then the filename is incremented, and the transfer begins. Incrementing a filename consists of changing the last character of the filename to a 0 (zero), then a 1, and so on.

If the Auto-Increment flag is set **off**, then the Overwrite Files flag is checked. If this is set **on**, the existing file is deleted and the transfer begins. If it is set **off**, then you are prompted for a different filename before the transfer can begin.

Zmodem – The exception to the rule

When downloading using any protocol except Zmodem, the Auto-Increment flag is checked first, and then the Overwrite flag. With Zmodem, there is a feature called Crash Recovery that causes filename han-

dling to be done a bit differently. It overrides the above mentioned flags under certain specific conditions.

If the file you are downloading already exists and the file on disk is smaller than the one being downloaded, there is a possibility that the file on disk is a partial download that has not been completed for some reason. In this case, Zmodem attempts to use Crash Recovery to pick up where you left off. Crash Recovery is only begun if the file being received is identical to the one on disk.

If the two files are not the same, then the original rules apply — a check of the Auto-Increment flag, and then the Overwrite, if Auto-Increment is **off**. If Overwrite is also **off**, the file is SKIPPED by the Zmodem download.

Save partials

Default: ON

A Partial is created when the Save Partials flag is set **on** and a download aborts. The portion that has been received successfully is not deleted. If it is set **off**, then any partially downloaded file is erased when the transfer aborts.

View GIFs

Default: ON

Turning this option **on** opens the GIF file viewer during the download of a .GIF (CompuServe Graphic Image Format) file. This allows you to see the picture file as you download it. Depending on the speed of your computer and your video hardware, GIF file viewing during a download may slow down the file transfer slightly.

Batch Download Options

System Date
File Date

Default: File Date

These two options allow you to specify your preference of file date and time on batch transfers. If you prefer to have all downloaded files dated the actual day and time you received them on your computer, select **System Date**. If you prefer to keep the original date on the file, select **File Date**.

Protocol Specific Options

Some protocols have additional configuration selections. Each of the following buttons pops up a dialog box with configuration options appropriate to the protocol.

Zmodem ...

Pops up the **Zmodem Options** dialog box.

Kermit ...

Pops up the **Kermit Options** dialog box.

ASCII ...

Pops up the **ASCII Options** dialog box.

CIS B+ ...

Pops up the **CIS B+ Options** dialog box.

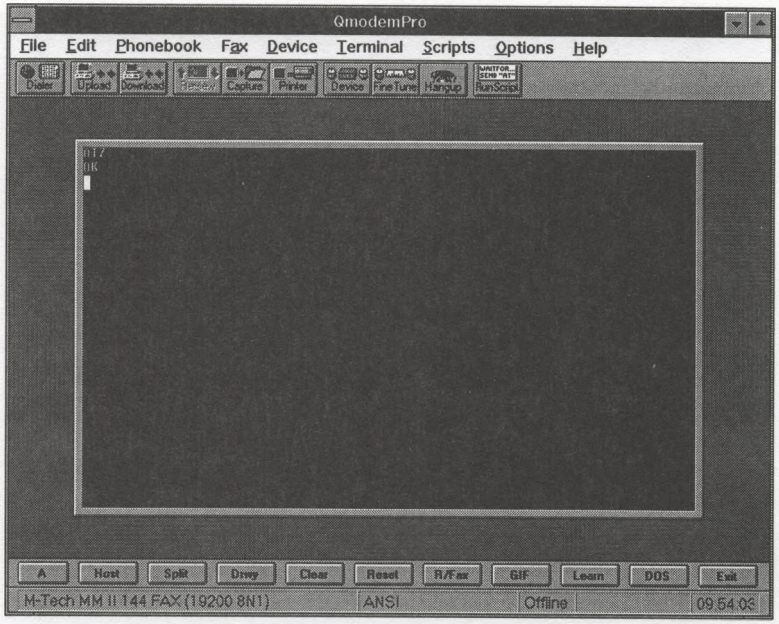
Protocols ... [menu command]

Where: QmodemPro/Options

See Also: Protocol Options

Pops up the **Protocol Options** dialog box.

QmodemPro Window


QmodemPro
File Edit Phonebook Fax Device Terminal Scripts Options Help
Dialer Upload Download Capture Printer Device FineTune Hangup RunScript
ATZ
OK
A Host Split Draw Clear Reset R/Fax GIF Learn DOS Exit
M-Tech MM II 144 FAX (19200 8N1) ANSI Offline 09:54:03

This is the main Terminal window from which all other windows are launched. It contains a menu bar, a tool bar, and a macro bar. The window in the middle of the desktop is the Terminal Screen.

QuickLearn ... [menu command]

Where: QmodemPro/Scripts

This menu command turns **on** the *QmodemPro for Windows* script recorder. For more information on scripts, please refer to Book 2 of this documentation.

Receive ... [menu command]

Where: QmodemPro/Fax

See Also: Receive Log
Auto-Receive
Fax Viewer
Path Definitions

Puts *QmodemPro for Windows* into manual Receive Fax mode and pops up the **Fax Receive Status** dialog box. The phone call will be answered immediately by *QmodemPro* in Fax mode, and the incoming Fax will be saved in the **Receive Fax** path specified in the **Path Definitions** dialog box.

This command runs once, then exits back to the terminal window. To receive Faxes automatically, use the **Auto Receive** command.

Receive Log ... [menu command]

Where: QmodemPro/Fax

See Also: Auto Receive
Fax Viewer

QmodemPro for Windows stores received Fax messages as files on disk. This menu command pops up a dialog box listing Faxes received and stored on disk. The list shows the **date** and **time** the Fax was received, the number of **pages**, and the **identifier**, usually the phone number of the originating Fax machine. From this dialog box, you can highlight a file in the list, then **View** the incoming Fax messages on screen, **Print** a Fax, or **Delete** a Fax from your disk.

To receive Faxes automatically, click on the **Auto Receive** check box. When a phone call comes in, *QmodemPro for Windows* will attempt to establish a Fax connection. If it is successful, it will receive the incoming Fax and store it on disk for later review.

Redo [menu command, button]

Where: Text Editor/Edit Menu + Tool Bar

See Also: "The Editor", Chapter 4

Restores the results of the last editing command removed with the Undo command. It "undoes" an "undo".

Repeat [button]

Where: Text Editor/Tool Bar

See Also: Find Text
Replace Text
"The Editor", Chapter 4

Repeats the current **Find** or **Replace** operation using the text entered in the **Find Text** or **Replace Text** dialog boxes.

Replace ... [menu command, button]

Where: Text Editor/Search Menu + Tool Bar

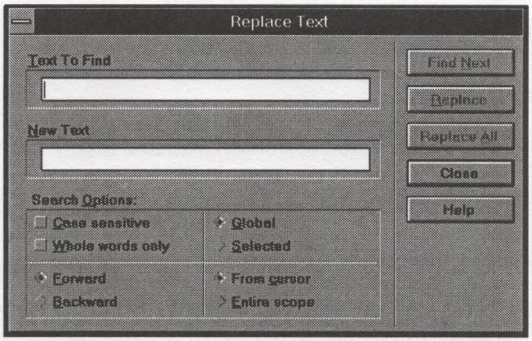
See Also: "The Editor", Chapter 4

The **Replace** dialog box allows you to define the text to search for, the text you want to replace it with, and search options.

Replace Text [dialog box]

Where: Text Editor/Search/Replace

See Also: "The Editor", Chapter 4



The **Replace** dialog box allows you to define the text to search for, the text you want to replace it with, and search options.

Find what:

Enter the text you want to find in this window.

Replace with

Enter the text you want to replace the found text with in this window.

Search options

Several options allow you to customize your search.

Case sensitive

Default: OFF

When toggled **on**, finds only text which matches the capitalization of the search text exactly.

Whole words only

Default: OFF

Searches for occurrences of the **Find** text only as whole words, in other words the found text must be surrounded by white space or punctuation.

Global

Default: ON

Searches the entire document for the **Find** text.

Selected text

Default: OFF

Searches for the **Find** text within a marked block of text.

Forward

Default: ON

Searches forward in the document, towards the end of the file.

Backward

Default: OFF

Searches backwards in the document, towards the beginning of the file.

From cursor

Default: ON

Begins forward or backward search from the cursor location.

Entire scope

Default: OFF

Begins forward or backward search from the beginning of the file or the end of the file, respectively.

Find next

Continues the search operation, using the data already in the **Text to find** window.

Replace

Replaces the current occurrence of the found text with the text in the **Replace with** window.

Replace all

Replaces all occurrences of the found text with the text in the **Replace with** window.

Reset Emulation [menu command]

Where: QmodemPro/Terminal

See Also: Clear Screen
Emulation Options

Clears the screen and homes the cursor, empties the scrollback buffer, resets color attributes to the default for the current emulation. If you're currently having trouble making sense of what you see on your screen, particularly if the current session started out all right, try the Reset Emulation command.

Reset Modem [menu command]

Where: QmodemPro/Device

See Also: Device Options
Device Modem

Sends the Modem Initialization string to the current device. Use this command to reinitialize your modem if you were disconnected from a host because of line noise, or if your modem isn't responding the way you expect.

Review [button]

Where: QmodemPro/Tool Bar

See Also: Scrollback
"Recording Your Session", Chapter 3

Goes into **Scrollback** mode. The Scrollback buffer contains a recording of your current session. Use the arrow keys, PG UP and PG DN down keys to page through the scrollback, or use the scroll bars on the side of the window.

Revise ... [menu command, button]

Where: Phonebook/File Menu + Tool Bar

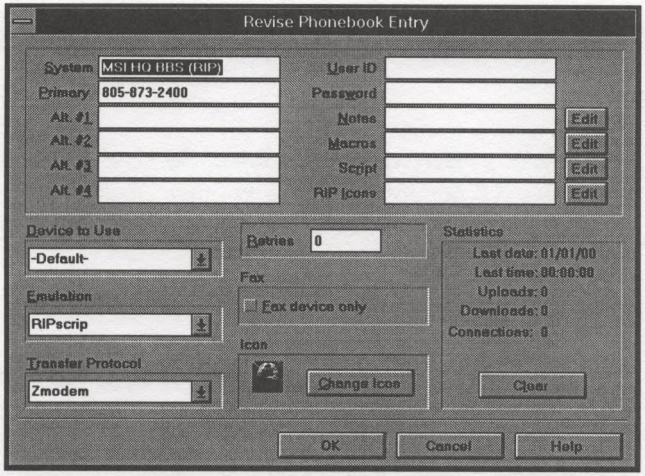
See Also: Phonebook Window
"The Phonebook", Chapter 3

Pops up the **Revise Phonebook Entry** dialog box for the selected phonebook entry or entries, allowing you to view and edit the entry.

Revise Phonebook Entry [dialog box]

Where: Phonebook/File/Add Entry
Phonebook/File/Insert Entry
Phonebook/File/Revise

See Also: "The Phonebook", Chapter 3
Macro Keys
Emulation Options
RIPscrip Options
Device
Edit Device
Protocol Options



System

This is the **name** of the host system BBS, or on-line service.

Primary

This is the **phone number** to dial for this system.

Alt. #1 - 4

Some multi-user systems offer alternate telephone numbers. Enter up to four alternate numbers in these four fields. When *QmodemPro for Windows* dials an entry, the primary number is tried first. If it is busy or does not answer, the numbers in the **Alternate Number** fields are dialed in order. See the discussion in Chapter 5 of **Special Control Characters** for more information on how to enter control code sequences in macros, modem command strings, and scripts.

User ID

This is the **name** you use to log into this service. This might be RICK HEMING for a BBS, or 75236,3312 for CompuServe, or rheming for a mainframe system. This item can also be used in scripts by using the USERID function and in macros by using the function @USERID.

Password

This is your **password** for this service. Be careful to choose a password that others will not easily be able to guess. This item can also be used in scripts by using the PASSWORD function, and in macros by using the function @PASSWORD.

Note

This is the name and path of the **Note** file associated with this phonebook entry. The Note file can be any DOS file. Text files can contain notes about the current entry, and *QmodemPro for Windows* will search this file during a text search. Use the **Edit** button to select from different file names, paths and drives.

Macros

This is the name and path of the **Macro** file associated with this entry. Use the **Edit** button to select from different file names, paths and drives. When the entry is dialed, the macros from this file will be displayed on the macro bar at the bottom of the terminal window.

Script

This is the name and path of a **Script** file associated with this entry. A script file in this field will be executed automatically when *QmodemPro for Windows* connects with the system in this entry, unless the dial command was started from a script in the first place.

RIP Icons

This is the path for **RIP Icons**, which are used in RIPscrip emulation mode to display certain menu items. RIP Icons are installed automatically in the default RIP Icons path for the entire system, which is defined in **Options/Path Definitions**. The path entered here is checked first for the specific dialing entry, and then the system path is checked. If this path is left blank, only the system path is used.

Device to Use

This is the communication **device** associated with this phonebook entry. This is the device *QmodemPro for Windows* will use to dial this entry. You can set this to one of the special predefined device names "**-Default-**" or "**-Current-**" if you wish.

Emulation

This is the **Terminal Emulation** to use with this phonebook entry.

Transfer Protocol

This is the default **Transfer Protocol** to be used when uploading and downloading files to this entry. Note that you always have the opportunity to change your protocol selection when you upload or download a file.

Retries

This is the number of times to attempt to dial and connect to this entry. If the phone is busy, *QmodemPro for Windows* will keep redialing until it connects, or until the number of **retries** matches the number in this field. A 0 (Zero) in this field indicates infinite retries.

Fax device only

Check this box if this phonebook entry is to be used to dial a Fax machine rather than another modem. If this box is checked, the **Fax Send** dialog box will pop up when you begin dialing, to request additional information.

Change Icon

You can associate regular Windows icons with Phonebook entries, and select Icon and Icon List viewing modes for your phonebook. The default icon is the *QmodemPro for Windows* "Q". Additional Phonebook icons are in a file called BBSICONS.DLL. Use the **Edit** button to select from different file names, paths and drives.

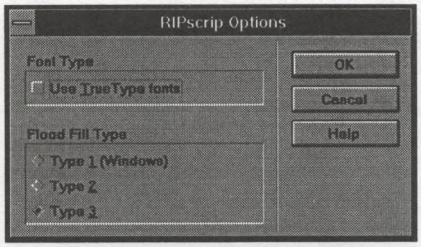
Clear

This button resets the statistics in the **Statistics** window back to zero.

RIPscrip Options [dialog box]

Where: QmodemPro/Options/Emulation Options/Font/RIPscrip Options

See Also: Emulation Options



This dialog box defines options specific to **RIPscrip** emulation mode. This is a graphical emulation offered by many Bulletin Board Systems, which

supports the mouse for menu selections, and displays 16 color graphics in 640 x 350 resolution.

Font Type

Use TrueType fonts

Default: OFF

TrueType fonts have an advantage over the standard RIPscrip fonts in that TrueType fonts are higher resolution and look better on your screen. Plus, they are scalable, meaning they can be enlarged or reduced on the fly to the exact size required by your application.

Turn this option **on** to use TrueType fonts Times and Arial in place of the RIPscrip Serif and Sans Serif fonts when you're in RIPscrip emulation mode. But note the cautions in the following paragraphs.

Caution: The RIPScrip emulation is not designed to be used with TrueType fonts. If you elect to use the TrueType fonts as replacements for the standard RIPscrip fonts you may experience screen display problems. These problems come about since the size and shape of the TrueType substitute fonts do not match the RIP fonts pixel for pixel.

The types of problems you may experience includes slightly offset text placement and overlap of text when multiple fonts are used. In cases where the screen uses an open-face font that has been filled with a color, you will probably find that the entire screen fills with the color. This is because the point selected for filling is no longer located within the boundaries of the original font character.

If you find these problems are happening regularly on the systems you call you should make use of the real RIPscrip font characters rather than the TrueType substitutes. The RIP emulation is not designed to use TrueType fonts, and our option to do so is an effort to offer an alternative higher resolution.

Flood Fill Type

Default: Type 1

There are three levels of support for the RIP Flood Fill operation in *QmodemPro*. A flood fill is the process of filling an area with a color. The reason these different levels are necessary is because many video drivers available for Windows 3.1 have bugs in the flood fill support routines. The bugs will manifest themselves as corrupted RIP screens, General Protection faults during RIP screens, or simply a lockup during a RIP screen. The three levels of support are explained below.

Type 1

This level uses the flood fill operation provided by Windows. This assumes that there are no bugs in Windows or the video driver. If there are bugs in the video driver they will show up when using this level. This option must be used under OS/2 or Windows NT or any operating system other than Windows 3.1.

Type 2

This level bypasses the Windows flood fill services and directly calls the video driver flood fill support routines. If there are bugs in the video driver, they will probably show up at this level, as well as at Level 1.

Type 3

This level bypasses both Windows and the video driver flood fill support routines and retrieves the pixels directly from the video driver. This level is guaranteed to work under Windows 3.1.

How to choose the best level

If you are experiencing problems with certain RIP screens (incorrect displays, GP faults, or lockups), and you are using Windows 3.1, the best level is probably level 3.

If you are using OS/2 or Windows NT or any other operating system other than Windows 3.1, you must choose level 1 (the other levels will actually be unavailable to you).

Save [menu command, button]

Where: Text Editor/File Menu + Tool Bar

See Also: "The Editor", Chapter 4

Writes the current file to disk, overwriting the original version of the file. To rename the file without overwriting the original, use the **Save As** command.

Save As [menu command, button]

Where: Text Editor/File Menu + Tool Bar

See Also: "The Editor", Chapter 4

Pops up a common dialog box, prompting you to enter a name, path and drive to save your text file. Use this command to create a new copy of an existing file without overwriting the original.

Screen [button]

Where: GIF Viewer/Tool Bar

See Also: Zoom

Enlarges the GIF viewer window to fill the entire screen. Click anywhere on the screen to return to the original window size.

Screen to Capture File [menu command]

Where: QmodemPro/Edit

See Also: Trap Screen
Screen to Clipboard
Screen to file
Capture
Scrollback
File Definitions
"Recording Your Session", Chapter 3

Copies the text in the current terminal screen to the default capture file.

Screen to Clipboard [menu command]

Where: QmodemPro/Edit

See Also: Trap Screen
Screen to Capture File
Screen to File
Capture
Scrollback
File Definitions
"Recording Your Session", Chapter 3

Copies the text in the current terminal screen to the Windows clipboard, where it can then be pasted into other screens or applications.

Screen to File ... [menu command]

Where: QmodemPro/Edit

See Also: Trap Screen
Screen to Capture File
Screen to Clipboard
File Definitions
"Recording Your Session", Chapter 3

Copies the text in the current terminal screen to the default screen trap file.

Screen to Printer [menu command]

Where: QmodemPro/Edit

See Also: Trap Screen
Screen to Capture File
Screen to File
File Definitions
"Recording Your Session", Chapter 3

Copies the text in the current terminal screen to the default printer.

Script [button]

Where: QmodemPro/Tool Bar

See Also: Book 2 - SLIQ Script Language Reference

Pops up a common dialog box prompting for filename, path and drive of the script to execute.

Scripts [menu]

Where: QmodemPro/Main Menu

See Also: Chapter 5, The QmodemPro for Windows Host

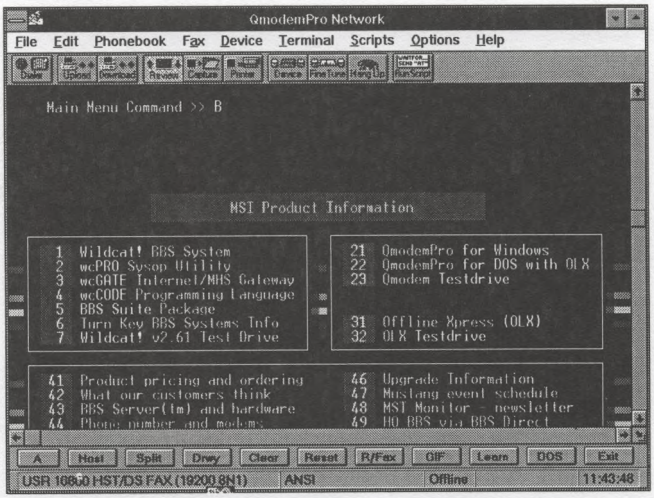
This menu offers commands to execute, QuickLearn, compile and debug scripts. You can also start the Host script from here. For more information on scripts, please refer to Book 2 of this documentation.

Scrollback [menu command]

Where: QmodemPro/Terminal

See Also: Trap Screen
Review
Scrollback to Capture File
Scrollback to File
Capture
Scrollback
File Definitions
"Recording Your Session", Chapter 3

As the on-line session proceeds, all text that appears in the terminal window is stored in a special scroll-back buffer. While in this mode, you can scroll backward and forward through previously displayed text. Following is a sample scrollback display:


QmodemPro Network
File Edit Phonebook Fax Device Terminal Scripts Options Help
Main Menu Command >> B
MSI Product Information
1 Wildcat! BBS System
2 wcPRO Sysop Utility
3 wcGATE Internet/MHS Gateway
4 wcCODE Programming Language
5 BBS Suite Package
6 Turn Key BBS Systems Info
7 Wildcat! v2.61 Test Drive
21 QmodemPro for Windows
22 QmodemPro for DOS with OLX
23 Qmodem Testdrive
31 Offline Xpress (OLX)
32 OLX Testdrive
41 Product pricing and ordering
42 What our customers think
43 BBS Server(1m) and hardware
44 Phone number and modems
46 Upgrade Information
47 Mustang event schedule
48 MSI Monitor - newsletter
49 HQ BBS via BBS Direct
A Host Split Draw Clear Reset R/Fax GIF Learn DOS Exit
USR 16800 HST/DS FAX (19200 8N1) ANSI Offline 11:43:48

Scrollback Record [menu command]

Where: QmodemPro/Terminal

See Also: Scrollback to Capture File
Scrollback to File
Scrollback
File Definitions

This command toggles the scrollback buffer **on** and **off.** A check mark appears on the menu next to this item when **Scroll back record** is **on**.

Scrollback to Capture File [menu command]

Where: QmodemPro/Edit

See Also: Scrollback to File
Scrollback
File Definitions

Copies the text in the current scrollback buffer to the default capture file.

Scrollback to Clipboard [menu command]

Where: QmodemPro/Edit

See Also: Scrollback to File
Scrollback
File Definitions

Copies the text in the current scrollback buffer to the Windows clipboard, where it can then be pasted into other screens or applications.

Scrollback to File [menu command]

Where: QmodemPro/Edit

See Also: Trap Screen
Scrollback to Printer
File Definitions

Copies the text in the current scrollback buffer to the default screen trap file.

Scrollback to Printer [menu command]

Where: QmodemPro/Edit

See Also: Scrollback to Capture File
Scrollback to File
"Recording Your Session", Chapter 3

Copies the text in the current scrollback buffer to the default printer.

Search [menu]

Where: Phonebook/Main Menu
File Viewer/Main Menu
Text Editor/Main Menu

See Also: "The Editor", Chapter 4

The **Search** command allows you to find and highlight text in a file or window exactly matching the search pattern you enter in a text dialog box.

Search Again [menu command]

Where: File Viewer/Search
Text Editor/Search

See Also: "The Editor", Chapter 4

Continues the search operation, using the data already in the **Text to find** field in the **Find** dialog box.

Select ... [menu command]

Where: QmodemPro/Device

See Also: Devices

The **Select** menu pops up a dialog box showing a list of all currently installed devices. Select a device by placing the mouse cursor over the desired device, and click the left mouse button once. Click the **OK** button to confirm your selection and return to the terminal window, or the **Cancel** button to close the window without making changes.

Select All [menu command]

Where: File Viewer/Edit
Text Editor/Edit

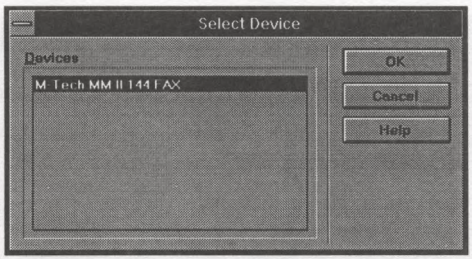
See Also: "Viewing a File", Chapter 3
"The Editor", Chapter 4

Selects (highlights) all the text in the current window.

Select Device [dialog box]

Where: QmodemPro/Device/Select

See Also: Edit Devices



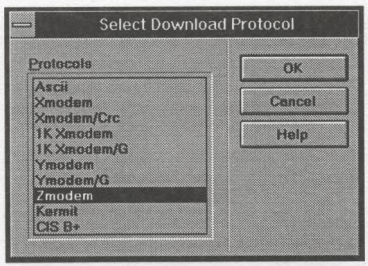
Devices

This is a list of all the devices you have defined. Select the device you want to use by moving the mouse pointer to the desired device, then click the left mouse button.

Select Download Protocol [dialog box]

Where: QmodemPro/File/Download

See Also: Download
Protocol Options
"Uploading and Downloading Files", Chapter 3



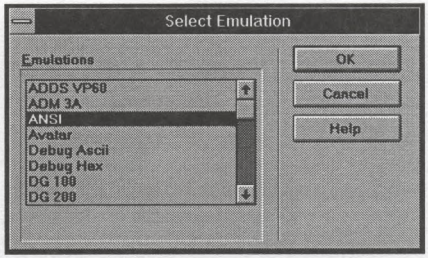
Protocol

The **Protocol** list shows the available file transfer protocols. Be sure to select the same protocol on both the host and local systems. For a detailed discussion of file transfer protocols refer to Chapter 3, *Using QmodemPro for Windows*. For a discussion of protocol configuration, refer to Chapter 4, *Advanced Operation*.

Select Emulation [dialog box]

Where: QmodemPro/Terminal/Emulation

See Also: Emulation options

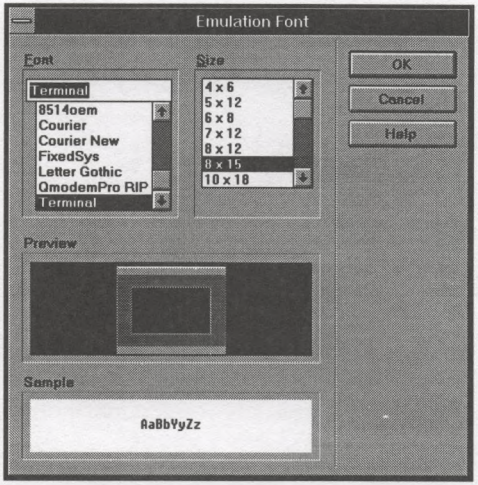


Emulations

Select the emulation you want to use by moving the mouse pointer to the desired emulation, then click the left mouse button. You can find more detailed information about the various terminal emulations in the On-Line Help.

Select Font [dialog box]

Where: File Viewer/Options/Font
Text Editor/Options/Font
Fax Send/Font
Manual Fax Send/Font



This dialog box allows you to change the default font (typeface), style and point size. This dialog box occurs in several places. In the Text Editor and File Viewer, the **Font** selection changes the appearance of the text in the Viewer or Editor window.

In the Fax Send and Manual Fax Send dialog boxes, the **Font** selection defines a particular typeface and style to use when sending a text file as a Fax message.

The window at the bottom of the dialog box shows a sample of your selected type font.

Font

Default: Terminal

This is the name of the Windows type **font**, for instance Courier or Terminal. The selection of fonts depends on what fonts you have installed from the Windows Control Panel font manager. Monospaced TrueType fonts such as Courier New are supported, and are denoted by a "T" to the left of the font name.

Font Style

Default: Normal

The **Font Style** can be normal, *italic*, **bold** or ***bold italic,*** depending on the styles available for a particular font. Italic, bold and bold italic are used for emphasis, while normal is used for regular text.

Size

Default: 12

The **Size** is measured in points, approximately 1/72 of an inch. The text you are reading right now, for instance, is 10 points, measured from the top of the highest letter, for instance the letter "f" to the bottom of the lowest letter, for instance, the letter "g".

12 point type is roughly equivalent to Pica or 10 pitch on a typewriter.

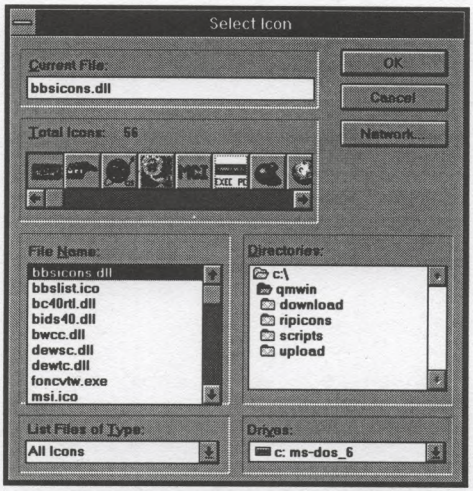
Sample

The **Sample** window displays the type font, style and size as it will appear in the viewer or editor window, or in your Fax document.

Select Icon [dialog box]

Where: Phonebook/Edit/Revise Phonebook Entry

See Also: Phonebook
List
Icon
Icon List



This dialog box allows you to view the icons in an .ICO, .DLL or .EXE file, and select the icon you would like to associate with a Phonebook entry.

To look at icons, select a file name from the **File Name** window, or browse other directories and drives for more selections. Your icons will appear in the window under the **Total Icons** legend. Double-click the icon you would like to select for your phonebook entry.

Send ... [menu command]

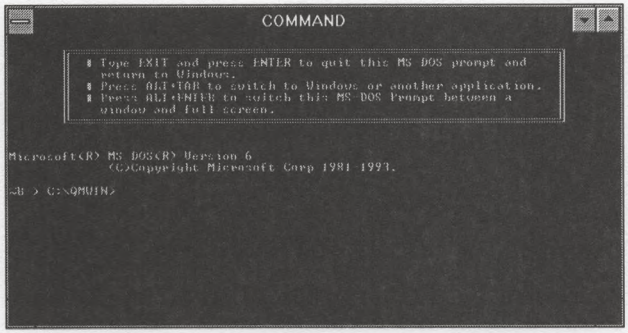
Where: QmodemPro/Fax

See Also: Phonebook
"Sending and Receiving Fax Messages", Chapter 3

Pops up the **Send Fax** dialog box prompting you to enter the device to use, telephone number to dial, the name of the sender and addressee, the name of the text, Windows .BMP or .PCX file on disk to send as a Fax, and additional selections for fine or regular Fax mode, default font, and whether or not to send the cover sheet.

Shell to DOS [menu command]

Where: QmodemPro/File


COMMAND
Type EXIT and press ENTER to quit this MS DOS prompt and return to Windows.
Press ALT+TAB to switch to Windows or another application.
Press ALT+ENTER to switch this MS-DOS Prompt between a window and full screen.
Microsoft(R) MS DOS(R) Version 6
(C)Copyright Microsoft Corp 1981-1993.
C:\> C:\QMUIN>

Opens a window which runs the command processor specified in the COMSPEC environment variable. The **Shell to DOS** command allows you to execute DOS commands or run DOS applications without having to switch back to the Program Manager.

Sort [menu command, button]

Where: Phonebook/Edit Menu + Tool Bar

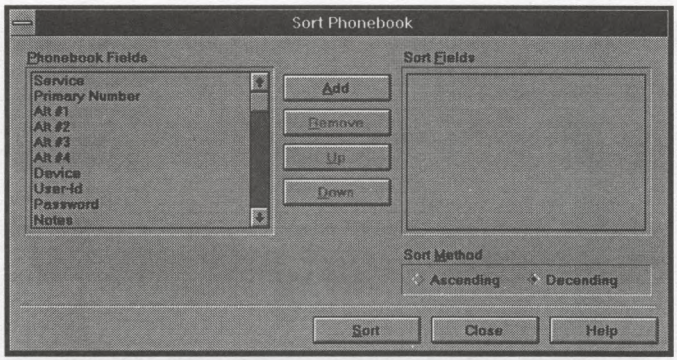
See Also: Sort Phonebook
"The Phonebook", Chapter 3

Pops up the **Sort Phonebook** dialog box, allowing you to rearrange your phonebook file.

Sort Phonebook [dialog box]

Where: Phonebook/Edit/Sort

See Also: Print Phonebook



You can sort phonebook entries based on the information in any combination of fields. For instance, to sort by area code, enter **Primary Number** as the first sort field. To sort by system name, select **Service** as the first sort field, and so on.

Phonebook fields

This list shows the names of all the fields in a phonebook entry. Select an entry by clicking on it with the left mouse button. Double-click to move the selected entry to the Sort Fields list, or use the **Add** button.

Sort fields

This is the list of fields on which the Phonebook will be sorted. If multiple fields are placed here, second level sorting or deeper is performed. For example, sorting by Phone and System results in a list by number, and within each area code, by System Name. Double-click on a field to remove it from the sort criteria.

Sort Method

Default: Ascending

These two options determine in what order the sorted entries will be arranged.

Ascending

Ascending puts letter A at the top and letter Z at the bottom, like a dictionary. Numeric entries are sorted with 0 at the top and 9 at the bottom

Descending

Descending sorts backwards, from Z to A and from 9 to 0.

Add

Use the **Add** button to move a phonebook field to the Sort Fields list.

Remove

Use the **Remove** button to delete a phonebook field from the Sort Fields list.

Up

Use the **Up** button to move the selected field in the Sort Fields list towards the top of the list.

Down

Use the **Down** button to move the selected field in the Sort Fields list towards the bottom of the list.

Sort

Begins the sorting operation. The sorted phonebook will replace the original version of the Phonebook file.

Sounds ... [menu command]

Where: QmodemPro/Options

See Also: "Customizing the Desktop", Chapter 3

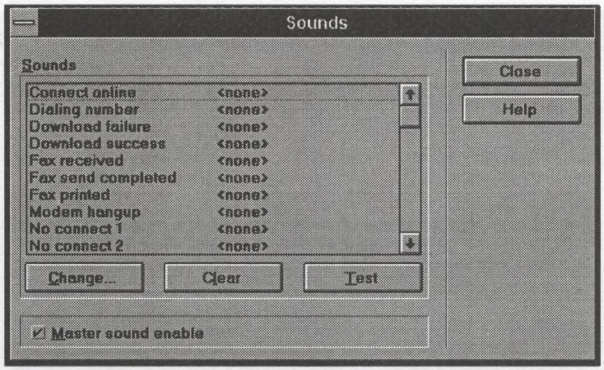
Pops up the **Sounds** dialog box, allowing you to associate Windows .WAV files with certain *QmodemPro for Windows* system events such as connecting and successful download.

Your PC must be equipped with a sound card, and the sound card drivers must be installed using the Windows Control Panel in order to use this feature.

Sounds [dialog box]

Where: QmodemPro/Options/Sounds

See Also: "Customizing the Desktop", Chapter 3



If your PC is equipped with a sound card or a sound driver for the PC speaker, and the appropriate drivers are installed in Windows, *Qmodem-Pro for Windows* will play .WAV files to notify you of certain system events.

Sounds

This window lists all the sounds, with their associated WAV file name. Select a sound to edit by clicking on it with the left mouse button.

Change

You can assign a sound to each event by selecting the event you wish to modify, then clicking the **Change** button. This pops up a file selection dialog box, allowing you to select and play a .WAV file.

Test

The **Test** button plays the selected sound file.

Clear

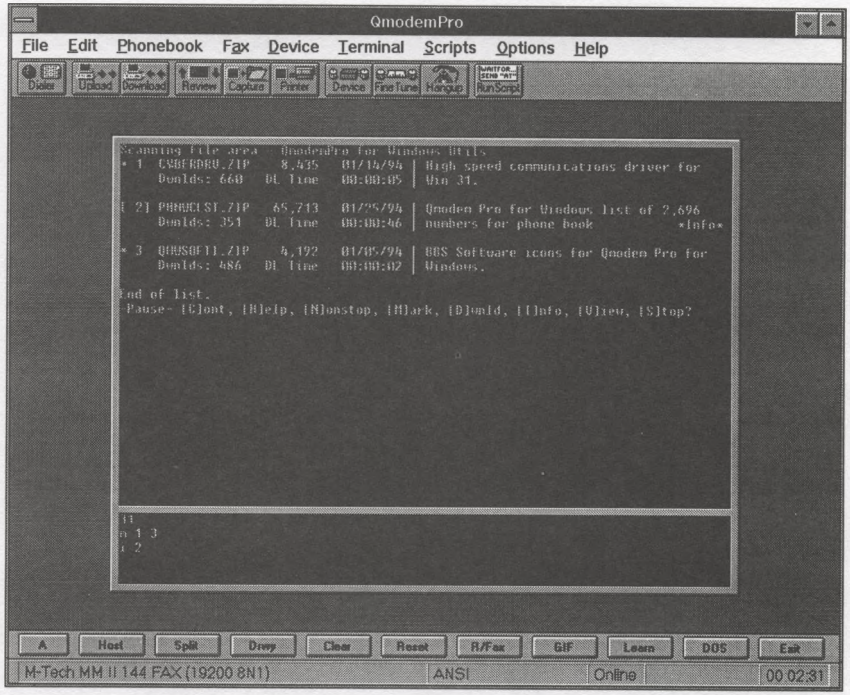
Restores the sound associated with the current selection to "None".

Master sound enable

When checked, the **Master Sound Enable** box turns on system sounds. When unchecked, all system sounds are turned off.

Split Screen [menu command]

Where: QmodemPro/Terminal


QmodemPro
File Edit Phonebook Fax Device Terminal Scripts Options Help
Dialer Upload Download Review Capture Printer Device FineTune Hangup Run Script
Scanning file area QmodemPro for Windows Utils
* 1 CWBERDBU.ZIP 8,435 01/14/94 | High speed communications driver for
Dwnlds: 660 DL Time 00:00:05 | Win 31.
[2] PHNDCLST.ZIP 65,213 01/25/94 | Qmodem Pro for Windows list of 2,696
Dwnlds: 351 DL Time 00:00:46 | numbers for phone book *Info*
* 3 QWKSDFLL.ZIP 4,192 01/05/94 | BBS Software icons for Qmodem Pro for
Dwnlds: 486 DL Time 00:00:02 | Windows.
End of list.
Pause- [C]ont, [H]elp, [N]onstop, [M]ark, [D]wnld, [I]nfo, [V]iew, [S]top?
A Host Split Dmny Clear Reset R/Fax GIF Learn DOS Exit
M-Tech MM II 144 FAX (19200 8N1)
ANSI
Online
00:02:31

In **split screen** mode, *QmodemPro for Windows* divides the screen into two areas to separate incoming and outgoing text. The larger section at

the top of the screen is reserved for incoming text received from the host computer. The smaller section at the bottom displays transmitted keystrokes.

Transmitted keystrokes are held in a buffer until the ENTER key is pressed or until you have entered 80 characters on a line.

Stop [button]

Where: GIF Viewer/Tool Bar

See Also: GIF Viewer window

When you load multiple files into the GIF viewer, for instance by dragging and dropping from the Windows File Manager, the GIF files are automatically displayed in a slide-show sequence, with a short pause between each file.

The **Stop** button takes the GIF viewer out of slide show mode, and leaves the current image on screen until you select the **next** or **previous** button.

Tab expansion [menu command]

Where: File Viewer/Options

See Also "Viewing a File", Chapter 3

When **on**, Tab Expansion expands the tab character (CTRL I or 09 hex) on screen, as white space. When **off**, the tab character is displayed. A check mark appears beside this menu item when it is turned **on**.

Tab Size ... [menu command]

Where: File Viewer/Options
Text Editor/Options

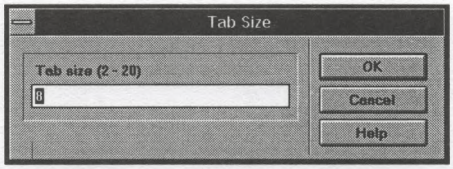
See Also: "The File Viewer", Chapter 3
"The Text Editor", Chapter 4

Pops up a dialog box allowing you to change the number of space characters assigned to a tab.

Tab Size [dialog box]

Where: File Viewer/Options/Tab Size
Text Editor/Options/Tab Size

See Also: "The File Viewer", Chapter 3
"The Text Editor", Chapter 4



Tab size 2 - 20

Default: 8

Sets the number of spaces assigned to each tab character when Tab expansion is toggled on. Enter the number of spaces in the text window.

Terminal [menu]

Where: QmodemPro/Main Menu

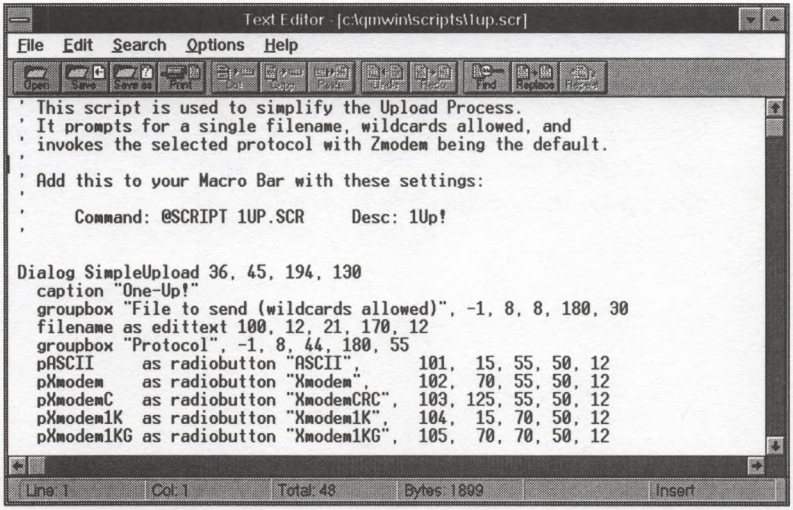
See Also: Emulation Options
"Customizing the Desktop", Chapter 3
"Changing the Appearance of the Terminal Screen", Chapter 4

This group of commands governs how your local terminal behaves. From here you can select a terminal emulation, clear the screen, view the scrollback buffer, and more.

Text Editor Window

Where: QmodemPro/File/Edit a file

See Also: View a File
"The Text Editor", Chapter 4


Text Editor - [c:\qmwin\scripts\1up.scr]
File Edit Search Options Help
Open Save Save as Print Cut Copy Paste Undo Redo Find Replace Replace
' This script is used to simplify the Upload Process.
' It prompts for a single filename, wildcards allowed, and
' invokes the selected protocol with Zmodem being the default.
'
' Add this to your Macro Bar with these settings:
'
'   Command: @SCRIPT 1UP.SCR   Desc: 1Up!
'
Dialog SimpleUpload 36, 45, 194, 130
  caption "One-Up!"
  groupbox "File to send (wildcards allowed)", -1, 8, 8, 180, 30
  filename as edittext 100, 12, 21, 170, 12
  groupbox "Protocol", -1, 8, 44, 180, 55
  pASCII   as radiobutton "ASCII",   101, 15, 55, 50, 12
  pXmodem   as radiobutton "Xmodem",   102, 70, 55, 50, 12
  pXmodemC   as radiobutton "XmodemCRC", 103, 125, 55, 50, 12
  pXmodem1K as radiobutton "Xmodem1K",   104, 15, 70, 50, 12
  pXmodem1KG as radiobutton "Xmodem1KG", 105, 70, 70, 50, 12
Line: 1 Col: 1 Total: 48 Bytes: 1809 Insert

The Text Editor window, like the Terminal and File Viewer windows, has a menu bar, tool bar, and status line. This is the window in which you can create and edit text files, for example scripts, note files and capture files.

Undo [menu command, button]

Where: Text Editor/Edit Menu + Tool Bar

See Also: Redo
"The Text Editor", Chapter 4

Removes the results of last editing command you executed. For instance, if you cut or cleared a block of text, the Undo command will restore the text to its original place in the document.

Upload ... [menu command, button]

Where: QmodemPro/File Menu + Tool Bar

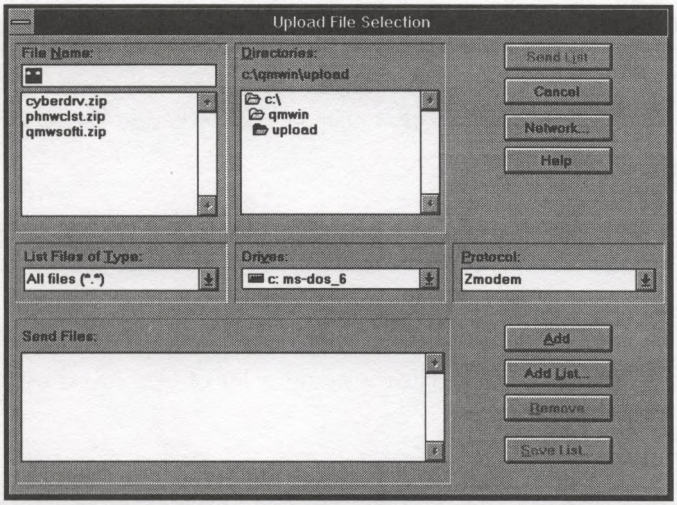
See Also: Upload File Selection
Path Definitions
Protocol Options
"Uploading and Downloading Files", Chapter 3
"What to do with Compressed Files", Chapter 3
"Viewing a File", Chapter 3

Uploading refers to copying one or more files from your computer to a host computer such as a BBS or on-line service. The Upload command pops up the **Upload File Selection** dialog box.

Upload File Selection [dialog box]

Where: QmodemPro/File/Upload

See Also: Upload
Upload Status
Download
Protocol
"Uploading and Downloading Files", Chapter 3



This dialog box allows you to select a transfer protocol, and select single or multiple files to upload to a host system, BBS or on-line service. The default upload drive and directory are taken from the **Upload Path** in the **Path Definitions** dialog box.

Send File(s)

Sends (Uploads) the file or list of files in the **Send Files** window. Wording and selection options depend on whether a single file protocol such as

Xmodem is being used, or a batch file protocol such as Ymodem or Zmodem.

Protocol

The **Protocol** list shows all the available file transfer protocols. Be sure to select the same protocol on both the host and local systems. The appearance of this dialog box will change according to whether a batch or non batch protocol is selected. Non batch protocols such as Xmodem do not allow you to select multiple files to send.

Send List (batch protocols only)

This is the list of files that will be sent (uploaded) when you select the **Send List** button. See the **Add** command below to add files to this list.

Add

Adds the files selected in the **File Name** window to the **Send Files** window.

Add List (batch protocols only)

Adds to the **Send Files** window a list of files saved using the **Save list** command.

This is a standard Windows Common Dialog Box. Refer to Chapter 3, *Using QmodemPro for Windows* in this manual, or your Windows manual, for a detailed description of the Common Dialog Box.

Remove (batch protocols only)

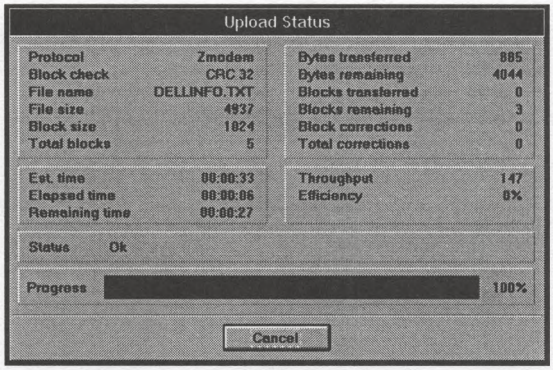
Removes a file from the list of files in the **Send Files** window.

Save List (batch protocols only)

Saves the list of files in the **Send files** window to a file on disk. See the **Add list** command above.

Upload Status [dialog box]

Where: QmodemPro/File/Upload/Upload File Selection/Send List



The upload status window shows the state of the current file transfer. See **Download Status** for an explanation of each item in this dialog box.

View [menu]

Where: Phonebook/Main Menu
GIF Viewer/Main Menu

This menu changes the size of the image on your screen.

View a File ... [menu command]

Where: QmodemPro/File

See Also File Viewer Window
"Viewing a File", Chapter 3

Opens a common dialog box which requests a file name, path and drive, then opens the **File Viewer** window, allowing you to view the contents of a text or binary file. The default path are filled in from the **Options/Files/Path Definitions** dialog box.

You may substitute your own file viewer in place of the internal one, by specifying the preferred program in the **Options/Files/Executable Programs** dialog box.

View a GIF File... [menu command]

Where: QmodemPro/File

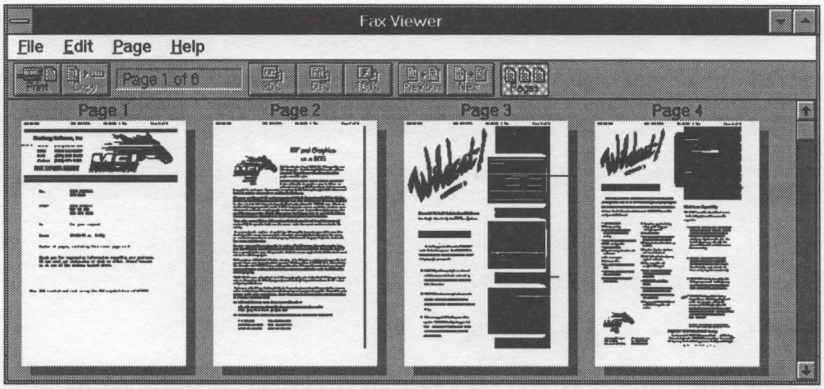
See Also: "Viewing a File", Chapter 3

Opens the **GIF file viewer,** allowing you to view files saved in the CompuServe Graphical Image Format. This is a commonly-used format for storing pictures on your PC.

View Pages ... [menu command]

Where: Fax Viewer/Page

See Also: Fax Viewer window



Displays multiple pages of a received Fax message in thumbnail images.

Wordwrap [menu command]

Where: Text Editor/Options

See Also: "The Text Editor", Chapter 4

When **wordwrap** is turned **on**, text at the right margin automatically wraps to the next line, without requiring a carriage return. When wordwrap is turned **off**, carriage returns must be entered manually.

Wrap at Column ... [menu command]

Where: Text Editor/Options

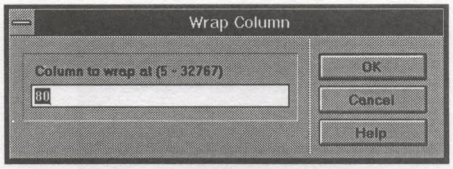
See Also: "The Text Editor", Chapter 4

Pops up the **Wrap Column** dialog box, allowing you to set the right margin.

Wrap Column [dialog box]

Where: Text Editor/Options/Wrap at column

See Also: "The Text Editor", Chapter 4



Sets the right margin for automatic **wordwrap**. If you are using the editor to compose text to upload into a message on a BBS or on-line service, the recommended setting is column 72.

Xon/Xoff [menu command]

Where: QmodemPro/Device

See Also: Device Connect

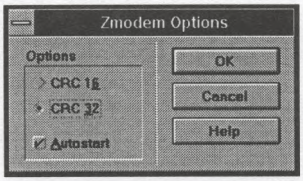
Xon/Xoff, or **software flow control** is a set of signals which start and stop the flow of data. When Xon/Xoff is turned **on**, CTRL S will stop the flow of data and CTRL Q will restart it. Xon/Xoff is generally used to control the flow of text viewed on the screen, or to prevent a data buffer overflow.

A check mark appears beside this menu selection when Xon Xoff is toggled **on**.

Zmodem Options [dialog box]

Where: QmodemPro/Options/Protocols/Zmodem

See Also: Upload
Download
Protocol Options
"Uploading and Downloading Files", Chapter 3



CRC 16
CRC 32

CRC (Cyclical Redundancy Check) is a very reliable method of error checking. Two methods of CRC calculation can be used for Zmodem transfers, 16 bit and 32 bit. In most cases 32 bit CRC is used. In fact, the CRC type is automatically negotiated by *QmodemPro for Windows* and

will switch to 16 bit when 32 bit CRC is not supported by the remote system. This option allows forcing 16 bit if special circumstances require it.

Autostart

When Auto-Start is enabled, Zmodem file downloads are started automatically whenever a Zmodem download transfer header is received. If this parameter is disabled, Zmodem downloads must be started manually with **File/Download** command.

Zoom [menu command]

Where: GIF Viewer/View Menu + Tool Bar
Fax Viewer/Page

Use the Zoom button to enlarge or reduce the section of the image under the mouse pointer. Click the left mouse button to enlarge (zoom in), or click the right button to reduce (zoom out).

Appendix

Baseball has the great advantage over cricket of being sooner ended.

George Bernard Shaw

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Troubleshooting Guide

Sometimes *QmodemPro for Windows* may not work for you the way you believe it should. In this section, we present a troubleshooting guide to some of the more common problems, and their solutions.

Before calling technical support with a problem, we recommend you spend some time reviewing the following list — it could save you some time and money, and get your system back to top performance.

If your troubleshooting efforts are to have any meaning, do not replace more than one component or change more than one software setting at a time because you won't be able to tell which new piece solved the problem without taking everything apart again.

Modem problems

Most problems with a communications program originate with the modem. It pays, therefore, to begin troubleshooting a problem by verifying that the modem itself is operational and connected properly to the PC.

Checking external connections

If you believe the modem is not working properly, check all external connections first. If you use an external modem, be sure that the modem is turned **on** and its power supply is plugged into an electrical outlet. Verify that the serial cable connecting the modem to the PC is securely plugged into both devices. And be sure the telephone line is plugged into the wall outlet and the modem.

If you use an internal modem, check the phone line connection, and verify that the modem is securely seated in its slot inside your PC. Always turn **off** the power before opening your PC!

Modem setup problems

If your modem still doesn't work the way it should after you've verified that it is connected properly, the next step is to investigate and correct the modem's internal settings.

First, let's verify that *QmodemPro for Windows* is communicating correctly with the modem.

Start *QmodemPro for Windows*, wait for the terminal screen to appear, and type

```
AT [ENTER]
```

at the terminal screen. If the modem is connected properly, it should answer

```
OK
```

or

```
0 (zero)
```

If it doesn't respond, here are some possible reasons:

- The modem is attached to a different COM port than *QmodemPro for Windows* is expecting. Try changing the software to look at the correct port.
- The modem is using the same IRQ (Interrupt ReQuest line) as another device (most commonly the mouse), and the other device is taking over the interrupt and preventing communication with the modem. Consider moving either the modem or the other device to a different port and IRQ to avoid further conflicts.

QmodemPro for Windows says "Carrier detected" or "Online" even when I'm not connected

The most common problem here is Carrier Detect being forced **on** by the modem. If the modem in question has a DIP switch for this function, set it so CD (Carrier Detect) is NOT forced **on**. Individual modems say this differently, and may range from "Follow line signal" to "Reflect Reality". Change the setting to have Carrier NOT forced, to Follow Line Signal, or to Reflect Reality. All of these indicate that is will NOT be forced into an

'**on**' state all the time, but will only be present when a caller is actually online.

If your modem DOES NOT have a DIP switch for this function, try sending the command

```
AT&C1 ENTER
```

If the problem persists even after checking these two items, there is but one other possible problem, and it usually isn't easy to troubleshoot. If CD is still seen it suggests that there is a second RS-232 port (or other device) making use of the same address that you are using. This is most commonly the result of inserting an internal modem addressed as COM2 in a PC that already has a COM1 and a COM2 either on the system board or on an add-in card.

The solution is to DISABLE the other COM2 so there is no conflict or confusion of the signals. This is usually done by either changing dip switches on the system board or add-in card, or removing a jumper over two or more pins. You will need the manual for the PC or the add-in card to perform this operation, and our technical support staff can help if you have the manuals and the hardware when you call.

It is important to realize that the conflicting or duplicate COM port does not even have to be operational, there only has to be an optional provision for addition of the offending port for it to be a conflict if not disabled. For example, many Multi-I/O boards come with a serial port and a game port, and so on, and offer an additional serial port which doesn't even have the chips installed unless you pay extra. However, the board often activates the jumpers for the second port, making it available at the address as a duplicate.

Modem doesn't dial

Does the modem have a speaker? Is the speaker turned on? Is the volume control turned up? The command to turn the modem speaker **on** during dialing is:

```
ATM1 ENTER
```

Raising and lowering the speaker volume is done in one of two ways. Some modems have a volume control knob, which you can adjust in the same way as your radio. Turn the volume high enough to hear the dial tone and connection negotiation. Other modems control speaker volume via a software command. This is often:

```
ATL1 ENTER
```

Other numeric values may be supported — generally speaking the higher the number, the louder the volume. Consult your modem manual for exact instructions.

Now try dialing the modem again. If it is working correctly, it will pick up (you hear a dial tone) and you will then hear tone or pulse dialing, the remote phone ringing, and a high pitched tone and hissing noise as the modems make the connection.

If you do not hear tone or pulse dialing, verify that you have entered the proper Dial String in the terminal command setup for your modem. The correct command for tone dialing is

```
ATDT
```

The correct command for pulse dialing is

```
ATDP
```

If you hear tones, but the call does not go through, it is possible your phone line does not allow tone dialing. Change the dial string to pulse (ATDP) and see if the call goes through.

If it still doesn't work, try putting an ordinary phone on the line, pick up the handset and dial an outgoing call. If the phone works and the modem doesn't, verify that the phone cord is plugged into the correct outlet on the modem. There are usually two outlets, one labeled "WALL", and the other labeled "PHONE". Not all modems are labeled, however. Try swapping the cord to the other jack, and repeat the test.

If the phone doesn't work, there may be a problem with another extension phone on the same line, or a problem with the phone line itself. Unplug all the other phones on that line, and try it again. If that doesn't help, there is probably a problem with the phone line. Ask your phone company repair office for assistance.

Modem doesn't hang up

Many modems come from the factory with the DTR signal forced TRUE (always **on**). *QmodemPro for Windows* wants to control the DTR signal to hang up the phone, since this is the most reliable method.

Some modems have dipswitches to control DTR, while others hold this information in their Non-Volatile RAM (NRAM). Check your modem manual to be sure of the correct procedure for setting DTR to follow line conditions.

On modems with NRAM, the command is usually

`AT&D2` ENTER

Then go into the **Device/Modem** dialog box, and change the **Hangup** command to "DTR".

Modem disconnects in the middle of a call

Does your phone line have Call Waiting or Call Alert service to inform you of incoming phone calls while you're talking to someone else? The click or beep sound notifying you of an incoming call is often enough to break a modem connection. Find out if your phone company offers "cancel call waiting" service — this is usually accomplished by dialing a special code before placing an outgoing call, and is active for the current call only.

Did someone pick up an extension phone in your home, while you were on-line? This frequently causes data calls to disconnect abruptly.

Are your telephone lines exceptionally noisy? When you pick up the phone, do you hear noises like static, whistling, rustling, or howling? All

these sounds can interfere with data communications, and many modems give up and disconnect when line noise becomes very severe. Check with your phone company's repair service to see if they can fix poor line quality.

Some long distance calls can be routed over noisy phone lines — in this case the best thing to do is hang up immediately and try placing the call again. Chances are your next call will be routed differently, and line noise will be less of a problem.

Incorrect flow control settings can also cause the modem to disconnect when it gets more data than it can handle. If you have a high speed (9600 baud or faster) or error correcting (MNP) modem, verify that CTS/RTS flow control is turned **on**. Verify also that the port speed or DTE is LOCKED at the appropriate value — generally 19200 or 38400 for most 9600 baud or faster modems).

Use the Quick Device Config for your modem to reset it to the correct operating values.

Dropped characters

Sometimes characters are dropped on the way from the modem to the computer. This problem is far more common with external modems than internal ones, which should already have the correct type of serial port chip installed on the modem itself.

This doesn't mean, by the way, that those lost characters pile up on the bottom of the PC's case, or on the floor behind your computer. An occasional cleaning will do no harm, but unfortunately does not recover lost data.

The end result of character dropping is that letters are missing from words, graphic screens are messed up, with some lines shorter than they should be, and raw ANSI code appears on the screen instead of being interpreted as colors. During uploads and downloads, the same problem causes transfer errors and resent blocks.

This is because for one reason or another, the modem is too fast for the serial port. If you have a high speed modem (9600 baud or faster), but the serial port is not designed to handle speeds higher than about 2400 baud or so, characters will be lost from time to time.

The ultimate fix is to replace the serial port chip with a 16550 buffered UART, but in the interim you could try some of the following suggestions:

1. Add the following lines to your SYSTEM.INI file under the [386enh] section:

   ```
   ComXBuffer=1024

   ComBoostTime=30
   ```

   Replace the letter X with the appropriate COM port number, 1-4. This increases the size of the buffer and helps prevent dropped characters. Use any standard ASCII editor to add this line, including the **File/Edit a File** menu choice. SYSTEM.INI is located in your Windows directory.

2. Next, from the Windows Control Panel, select "386 Enhanced". Change the "Minimum Timeslice" to 30 (the default value is 20). This may help resolve some timing-related problems by allowing each task more CPU time.

3. Your disk cache may be interfering with data from the COM port. Try disabling "staged writes" or "delayed writes" in your disk cache, and see if the problem improves.

4. Try lowering the DTE speed — if it's locked at 57600 your computer may in fact not be able to keep up with the modem, and characters will get lost. You won't notice any significant change in throughput by locking at 19200 or 38400.

5. Consider upgrading the Windows communication drivers by purchasing a high performance com driver package such as Turbocom or Cherry Hill. Information about high performance com drivers is at the end of this section.

Garbled screens

There are several possible causes here. If the garbled screens begin as soon as you start *QmodemPro for Windows* it usually indicates that your mouse is connected to the serial port you have specified for your modem. You may have mistakenly indicated the wrong serial port, or your mouse may be using the same IRQ as your modem (especially if you have an internal modem and a serial mouse). The solution to this problem is to determine which IRQ is being used for your mouse and your modem, and to change one or the other to avoid the duplication.

The other most common cause is related to the problem discussed previously — characters come into the serial port faster than the computer can process them, and they are lost rather than held in a buffer. This causes ANSI screens to break up and display the raw ANSI code (arrows, square brackets and numbers) rather than interpreted color attributes.

The next likely cause is line noise. Lower speed modems (300, 1200 and 2400 baud) are more susceptible, since most of these do not have built-in error correction.

Since the modem converts binary digits into sound, then transmits those sounds over phone lines, any stray noises added by the phone company's switches and circuits could be interpreted by the modem as data.

Line noises causes stray characters such as curly brackets and check marks to be interspersed with the text you expect to see on screen. If line noise is a continual problem, consider asking your local phone company's repair service to investigate, or upgrade to an error correcting modem which filters out these stray characters.

Software settings are another possible cause for garbled screens. There are a couple of settings in the *QmodemPro for Windows* configuration itself which might cause problems. The typical symptom here is that you see letters and numbers instead of lines and block graphics, or odd high-ASCII characters in words.

One possible cause is that you're logging on at 7 bits instead of 8 bits (since the letters and numbers you see are the graphic characters without the 8th bit). You can change this by changing the phonebook device entry to 8-N-1 from 7-E-1 for systems affected by this.

Another possibility is that you've got **8th bit strip** turned **on**. When you're connected to a system that is doing this, select **Emulations/8th Bit Strip** and see if the screens look better.

Finally, it could be that you are using TTY terminal emulation instead of ANSI, and *QmodemPro for Windows* is thus not interpreting the ANSI escape sequences (a lot of [brackets and numbers) as graphics and color. Try changing the emulation by selecting **Terminal/Emulations** and select ANSI.

File transfer errors

File transfer problems can be difficult to trace, since there is as much likelihood the problem is on the remote system as on your own system.

You should suspect an error in the way you have set up *QmodemPro for Windows* if you have the same problems on every remote host you call.

File transfer status window

The upload and download status windows display the current status of the transfer — name and size of file (if known), number of bytes transferred, characters per second, and percent completed (if known). Protocol error messages are also displayed in this window, and may provide some clues about the problem.

Note that the term Download always refers to receiving a file onto your PC from a remote computer, and Upload refers to sending a file from your PC to a remote computer.

Some modems have separate flow control settings for sending and receiving. Check your modem manual for information, and be sure both sending and receiving flow control are turned on properly.

Download errors (receiving files)

If uploads work and downloads don't, this is an indication of a flow control or buffer overrun problem. Check your flow control settings in *QmodemPro for Windows*, and check the modem itself if it has flow control settings.

UART overrun occurs when the modem receives data faster than the computer can process it, and any bits not processed are lost instead of being stored. When bits are lost in this way, the UART signals the PC that an overrun error has occurred.

A buffered UART chip (the NS16550AFN) is a relatively inexpensive solution to the UART overrun problem. This is a regular 40-pin IC chip which replaces the 16450 or 8250 chip on your serial board, and is available from most electronic supply houses. Or try lowering the DTE lock rate.

Upload errors (sending files)

If downloads work and uploads don't, the problem most likely originates with the remote computer — especially if the problem is not evident on more than one system you call. There is not much you can do at your end, other than leaving a message to the system operator indicating you're having upload problems. Always include as much detail as you can in your message — the transfer protocol you used, the baud rate, any error messages you saw while uploading, and the approximate number of bytes transferred before the errors occurred.

If you experience upload problems on most of the systems you call, the problem is more likely to be with your own modem's configuration — some modems have separate flow control settings for both receiving and sending. Consult your modem manual for help if you suspect this may be the case.

File transfers slow

Some transfer protocols are inherently more efficient than others, and protocol selection therefore has a great bearing on how fast *QmodemPro for*

Windows transfers your data. Using an efficient protocol such as Ymodem or Zmodem and clean phone lines, you should expect throughput of around 1000 to 1100 characters per second (CPS) at 9600 baud, 1500 to 1600 CPS at 14,400 baud. 2400 baud connections without error correction should average around 230 characters per second.

Just as with automobiles, however, your mileage may vary. File transfer speed can be influenced by many factors, from the speed of your computer to the number of active Windows applications you have opened. So long as the transfer window is not reporting errors, you should not be too concerned about transfer speed unless it is more than 10 to 15 percent slower than the figures quoted above.

Because transfer protocols perform error detection during a transfer, blocks of data which are not received correctly will be retransmitted until they are received correctly. Depending on the amount of retransmitted data, this will definitely slow down the overall speed of the transfer, but in the vast majority of cases the file is eventually transferred correctly.

Some conditions which commonly contribute to file transfer errors are phone line noise (static on the line interpreted as data by the modems), incorrect flow control settings, and UART overruns. The protocols are designed to terminate (abort) the transfer after a certain number of consecutive errors.

File transfers abort

File transfers may abort because too many errors were detected by the transfer protocols, as discussed above. There are other reasons a transfer may terminate unexpectedly, however.

Someone in your house might pick up an extension phone while you are on-line — this almost always causes a file transfer to abort, and may break the connection altogether! Call Waiting service on your phone line will almost certainly cause a file transfer to stop if an incoming call comes during an on-line session. Or the system operator on the remote computer may abort the transfer manually.

Another possible cause might be a sudden burst of line noise, although this is more likely to be a problem with non-error correcting modems. Modem error correction helps a tremendous amount with noisy phone lines, but it is not infallible, and extreme line noise can interrupt file transfers whether or not your modem has error correction built in.

Some hardware related causes for aborted transfers include standard DOS errors such as "File not found" or "Disk full", and problems with your memory and drives. Check your available disk space before receiving a large file, and check the spelling of a filename and path before trying to upload.

Replacing the Windows communication drivers

Third party communication drivers are available for Windows, which replace the internal drivers and offer additional support for high speed modems, nonstandard communication ports, and improve the speed and reliability of background communications.

If you are having problems that can be attributed to the Windows communication drivers, you may achieve better results by upgrading to one of these alternatives.

Two examples are TurboCom, a commercial package published by Pacific CommWare in Ashland, OR (503-482-2744), and the Cherry Hill VM Comm Buffer Driver, a shareware program published by Cherry Hill Software (609-983-1414).

Complete installation instructions are provided with both packages.

Upgrading your serial port card

Several serial card upgrades are available for Windows users, which overcome the problem of dropped characters, transfer errors, and poor performance. These cards are designed to replace the serial port in your PC, and must be used with an external modem.

Three high performance serial cards tested with *QmodemPro for Windows* are the Hayes ESP Communications Accelerator for Microsoft Windows

(Hayes Microcomputer Products, Inc., P.O. Box 105203, Atlanta, GA 30348. Phone: 404-441-1617, Fax: 404-449-0087); the T/Port Serial Communications Coprocessor (Telcor Systems Corporation, 4 Strathmore Road, Natick MA 01760. Phone: 508-653-3995, Fax: 508-651-0065), and the DigiBoard PC/Xi, MC/Xi, and PC/Xe intelligent multiport serial cards (DIGI International, 6400 Flying Cloud Drive, Eden Prairie, MN 55344, Phone: 612-943-9020, Fax: 812-943-5398).

Changing your port settings in Windows

Modems are not the only accessories that can be connected to a COM port. If your computer has a Mouse, Trackball or other Pointing Device, it may be connected to a COM port. Also, some kinds of printers are connected to Serial ports rather than Parallel ports.

When you install your modem, you may need to find out what other devices are connected to communication ports in your PC. Each device needs its own address, but most devices also allow you to select additional addresses by moving switches or jumpers on an expansion card, or by running the setup utility for your computer.

Because there are so many different devices available for PCs, and different ways of setting them up, it's not possible to go into all the variations here. If, after installing your modem, you feel it is not working correctly, the fastest way to solve the problem is to call our Technical Support lines. Our technicians are experienced and knowledgeable, and they want to help you use and enjoy *QmodemPro for Windows*.

To use your modem on COM3 or COM4, you may need to make some changes to the port settings in Windows in order for *QmodemPro for Windows* to work correctly. You may also need to change the IRQ settings on your serial card or internal modem, if your Windows communication drivers do not support more than one device per IRQ.

To do this, go to the Program Manager, Main Program Group. Double click the **Control Panel** icon, and select **Ports** from the window that pops up. From there, select the port you want to modify, go to **Advanced** settings, and make the appropriate changes to the Base Address and IRQ.

Refer to your Windows documentation, and the manual for your modem, serial card and communication drivers for information on how to set and select IRQ and Base Address.

Other hardware problems

In rare instances the modem itself, or the serial port or cable, may be defective. You should consider this a possibility only if the preceding troubleshooting suggestions do not work, or work very inconsistently.

Substitute a different modem if you can, and see if the problems persist. Replace the modem cable — an intermittent bad connection inside the cable can cause problems every time the modem or cable is moved. Modem cable problems can be especially difficult to track down. Try a different serial port card, too.

If the modem will not work properly no matter what you do, your next step should be to contact the modem manufacturer's own technical support department. They will be able to provide up-to-date information on known problems with your modem model, and in many cases offer inexpensive or free ROM updates.

Software problems

In most cases, *QmodemPro for Windows* should run correctly as installed, without modification to its basic setup. Be sure you understand the implications before you make changes to the basic operational parameters of the program, and make note of the settings you change, so that they can be restored to their original state if necessary.

Error messages

When a program error occurs, an information window will pop up over your screen with a brief description of the error. The error message may be generated by *QmodemPro for Windows*, or by another Windows application, or by Windows itself.

There are two basic types of program errors. A fatal error means that the problem was severe enough that the application could not recover, and

must be closed down. Fatal errors are not necessarily the fault of *QmodemPro for Windows* — other applications can sometimes unexpectedly use memory or devices belonging to *QmodemPro for Windows* and cause a crash.

A serious error will probably require you to close all applications, exit Windows, and restart your computer, so you should save your work in other windows, if you can, before rebooting.

A non-fatal error is one which indicates that needed configuration information is not present, or conflicts with other settings, or that an error was encountered that was not severe enough to shut down the program. The error messages will indicate the nature of the problem, and may suggest how to fix it.

General Protection faults

A General Protection or GP fault occurs when an application overwrites memory belonging to another application. Since the memory has become corrupted, Windows steps in and terminates the application.

It is not always easy to tell which Windows application caused the GP fault. Sometimes the error message window will provide an application name and a memory address, but this information is not always reliable. The best thing to do when you get a GP fault is to save your work in your other applications, and exit and restart Windows as soon as possible.

If you get a lot of GP faults when you use *QmodemPro for Windows*, make note of the steps you took immediately before the program crashed, and report the details to MSI Technical Support.

RIPscrip problems

If you consistently experience GP faults in RIPscrip mode, the most likely cause is the Flood Fill mode you've selected. There are three levels of support for the RIP Flood Fill operation in *QmodemPro*. A flood fill is the process of filling an area with a color. The reason these different levels are necessary is because many video drivers available for Windows 3.1 have bugs in the flood fill support routines. The bugs will manifest them-

selves as corrupted RIP screens, General Protection faults during RIP screens, or simply a lockup during a RIP screen. The three levels of support are explained below.

Level 1

This level uses the flood fill operation provided by Windows. This assumes that there are no bugs in Windows or the video driver. If there are bugs in the video driver they will show up when using this level. This option must be used under OS/2 or Windows NT or any operating system other than Windows 3.1.

Level 2

This level bypasses the Windows flood fill services and directly calls the video driver flood fill support routines. If there are bugs in the video driver, they will probably show up at this level, as well as at Level 1.

Level 3

This level bypasses both Windows and the video driver flood fill support routines and retrieves the pixels directly from the video driver. This level is guaranteed to work under Windows 3.1.

How to choose the best level

If you are experiencing problems with certain RIP screens (incorrect displays, GP faults, or lockups), and you are using Windows 3.1, the best level is probably level 3.

If you are using OS/2 or Windows NT or any other operating system other than Windows 3.1, you must choose level 1 (the other levels will actually be unavailable to you).

Other screen display problems

On some systems, *QmodemPro for Windows* can't find a proper sized OEM font for a few of the edit controls, for instance in **Options/Macros**,

Options/Emulations/Keyboard, and **Options/Emulations/Translations.** If you have this problem, try adding the line

```
AnsiDialogs=Y
```

in the [General] section of the file QMWIN.INI, in your Windows directory. You can use the *QmodemPro for Windows* editor to do this, or any other text editor. This option will force *QmodemPro for Windows* to use a scalable ANSI font that will display properly in these circumstances. Note however that ANSI fonts do not display characters above 128, so any high-bit characters in these dialogs may not display properly. You can still edit these high-bit characters in Hexadecimal or Decimal mode on these screens.

Lockups

A computer is said to be locked up when it is completely unresponsive to the mouse or keyboard. Keep in mind that when a program is busy performing some operation, it may not respond for a period of time — usually when this is the case you will see an hourglass icon on the screen rather than the usual mouse pointer.

If your computer seems to have locked up, wait a couple of minutes and try again. If it has not returned to life after that period of time, you will probably need to reboot and restart Windows. Rebooting the PC will cure the lockup, but any unsaved work will be lost!

It is unusual for a program such as *QmodemPro for Windows* to crash or cause your computer to lock up completely. It has been thoroughly tested under a variety of operating environments and conditions to ensure its reliability, but some unforeseen combinations of hardware and software can cause problems.

If you are able to make *QmodemPro for Windows* crash or lock up your computer repeatedly, please convey this information to MSI Technical Support, with as much detail as possible about your system configuration and the exact sequence of keystrokes and operations which led to the lockup.

Segment Load Failure messages

A "segment load failure" is a Windows error, and usually indicates a corrupted permanent swap file. To reinitialize the permanent swap file, go to the Windows Control Panel and select **386 Enhanced.** From there, select **Virtual Memory**, then select the **Change** button. You will then have the opportunity to review your swap file settings. Click **OK** to recreate your swap file. You may have to exit and restart Windows for the change to take effect.

Fax Problems

Sending and receiving Fax documents using a Fax modem can sometimes be troublesome. If you have difficulty try these suggestions.

Check the **Options/Device/Hardware/Baudrate** (not the Fax baudrate) and set it to 19200. This has proven to be the best selection for almost all Fax modems. The port may be locked at this rate. The Fax baud rate only controls the starting speed for Fax, which will be adjusted by the two Fax devices. 9600 is the standard Fax baud rate.

Try closing all other applications while sending documents and don't minimize *QmodemPro* when sending or receiving documents. Fax transmission is very timing dependent. When sending Fax documents you may experience problems if you have several other applications active at the same time, or if you try to send documents while *QmodemPro* is minimized and your system is performing other activity at the same time.

Note that Fax documents cannot be sent using Int 14, Digiboard or other drivers. Only Serial devices are supported. If the port (in **Options/Device/Hardware**) is set to anything but a Serial selection, you will be unable to set or change any FAX options.

Log File Entries

Here is a complete list of log file messages reported by *QmodemPro for Windows:*

```
Command    LOG ENTRY

DOS Shell          @SHELL [Dos command and parameters]
    ++ @SHELL Failed
    ++ @SHELL Successful
Select a Device          Device Selected : [Device Name]

Function Keys    New KEY file [Filename]

Edit a file      Edit File [Filename]

View a file      View File [Filename]

Drop to DOS      Dropping to DOS
    ++ Drop to DOS failed

Exit QmodemPro   Exit QmodemPro

Dialing Directory      Connected With  : Mustang Soft-
ware HQ
    ++ Phone Number : 1-805-873-2400
    ++ Comm Speed     : 57600 8-N-1

Dialer Dialog

Cmds sent to Device    Command: 1-805-873-2400

Responses from Device Device : ATDT1-805-873-2400
    Device : RINGING
    Device : CONNECT 16800/ARQ/HST/HST/V42BIS

User untagged an entry       Dialer : Current entry has
been untagged

No More Tags Msg       Dialer : No more entries to dial
```

```
Error initing device  *Error : Could not initialize De-
vice

Fax Digitize Failed   *Error : Could not send the Fax
file
    *Error : Error locating Fax Info Record
    *Error : Error joining Fax and COVERSHEET
    *Error : Error Loading font: LARGE.FNT
    *Error : Error Loading font: SMALL.FNT
    *Error : Error creating [FaxFilename]
    *Error : Error writing [FaxFilename]
    *Error : Error opening [FaxFilename]
    *Error : Error reading [FaxFilename]
    *Error : Error writing Fax file
    *Error : Error opening PCX file
    *Error : Error reading PCX header
    *Error : Invalid PCX file
    *Error: PCX file must be Black and White only
    *Error : PCX file is too large

No Fax Device Msg     *Error : Assigned Device does not
support Fax

Dial Timed Out Msg    Timer : No connection in speci-
fied time-limit

Timer : Timer expired

Download ASCII  Download ASCII
    ++ File [Filename]
    ++ File Saved
    ++ No DATA received.  File not saved
```

```
Download  Download File(s).  Protocol : [Protocol Name]
    ++ Download Failed
    ++ File [Filename]
    ++ Skipped [Filename]
    ++ Chars Per Second     : [CPS]
    ++ Effective Percent    : [Efficiency]%
    ++ Timeout waiting for character
    ++ Handshake failed
    ++ Handshake canceled on request
    ++ Cancel requested
    ++ Fatal error during protocol
    ++ Duplicate block received
    ++ Wrong block number received
    ++ Directory not found in protocol transmit
    ++ No matching files in protocol transmit
    ++ Long packet received during protocol
    ++ End of transmitted file
    ++ Protocol handshake in progress
    ++ Incoming file was renamed
    ++ Header has bad file size
    ++ Header has bad date/time
    ++ Unexpected char during protocol
    ++ Incorrect CRC or checksum received
    ++ Received file rejected
    ++ Too many errors received during protocol
    ++ Garbage from remote
    ++ Skip file
    ++ Bad file position
    ++ Specified file does not exist
    ++ Not allowed to overwrite file
    ++ Never got proper handshake
    ++ No files to receive
    ++ File was renamed
    ++ End of file
    ++ Output buffer overflow
    ++ Directory not found
    ++ No matching files

Upload ASCII    Upload File.  Protocol : ASCII
    ++ File [Filename]
    ++ Transfer Successful
```

```
Upload    Upload File(s).  Protocol : [Protocol Name]
    ++ Upload Failed
    ++ File [Filename]
    ++ Skipped [Filename]
    ++ Chars Per Second     : [CPS]
    ++ Effective Percent    : [Efficiency]%
    ++ Timeout waiting for character
    ++ Handshake failed
    ++ Handshake canceled on request
    ++ Cancel requested
    ++ Fatal error during protocol
    ++ Duplicate block received
    ++ Wrong block number received
    ++ Directory not found in protocol transmit
    ++ No matching files in protocol transmit
    ++ Long packet received during protocol
    ++ End of transmitted file
    ++ Protocol handshake in progress
    ++ Incoming file was renamed
    ++ Header has bad file size
    ++ Header has bad date/time
    ++ Unexpected char during protocol
    ++ Incorrect CRC or checksum received
    ++ Received file rejected
    ++ Too many errors received during protocol
    ++ Garbage from remote
    ++ Skip file
    ++ Bad file position
    ++ Specified file does not exist
    ++ Not allowed to overwrite file
    ++ Never got proper handshake
    ++ No files to receive
    ++ File was renamed
    ++ End of file
    ++ Output buffer overflow
    ++ Directory not found
    ++ No matching files

CIS BPlus Protocol (none)   CIS BPlus Transfer
    ++ File [Filename]
    ++ Skipped [Filename]
    ++ Chars Per Second     : [CPS]
    ++ Effective Percent    : [Efficiency]%
```

```
Online Timers (auto)  Online Timer Started
    Elapsed Online hh:mm:ss

Send BREAK        BREAK signal sent

Load New .PHN     New PHN file [Filename]

Host Mode Messages
    ********** HOST STARTED **********
    ++ HOST Header file created
    ++ HOST Detail file created
    ++ HOST > Keyboard Timeout
    ++ HOST CALLER > Firstname Lastname
    ++ HOST CALLBACK Firstname Lastname
    ++ HOST HANGUP > Firstname Lastname
*********** HOST ENDED ***********

Hangup Command  Hangup Command entered

@Stamp Key macro       STAMP [text]
```

Files used by *QmodemPro for Windows*

QMWIN.EXE

This is the main executable file (program file) for *QmodemPro for Windows*. While the program is running, it sometimes calls on routines stored in .DLL (Dynamic Link Library) files, described below.

FONCVT.EXE

Phonebook conversion program for converting other com program phonebook formats to *QmodemPro for Windows*.

QMWIN.CNF

The main configuration file, created and maintained automatically by *QmodemPro for Windows*.

QMWIN.EMU

Emulation settings including colors, etc.

QMSCRIPT.DLL

DLL (Dynamic Link Library) containing the script compiler.

QMINST.DLL

DLL (Dynamic Link Library) containing the installation program.

QWQDC.DLL

DLL (Dynamic Link Library) containing Device Quick Configuration information.

QMRIP.FON

Font file used for RIP emulation.

BC40RTL.DLL, BIDS40.DLL, OWL200.DLL, BWCC.DLL WINSYS.DLL DEWSC.DLL DEWTC.DLL

Helper DLL files, which work with *QmodemPro for Windows* to provide special library functions.

*.CHR

Compatibility fonts for RIP emulation.

*.PHN, *.GRP, *.ICD

Phonebook, Group and Icon Directory files, respectively. Each Phonebook (PHN) file has its own set of .GRP and .ICD files.

*.WAV

Various .WAV files that can be used for the **Options/Sounds** configuration.

*.SCR, *.SCC, *.SCD

The script source (.SCR), compiled scripts (.SCC), and debug files (.SCD) of *QmodemPro for Windows* script language, SLIQ. Refer to Book 2 of this documentation for more information on Scripts.

*.MCR

Macro files for storing macro bar settings.

\WINDOWS\QMWIN.INI

Contains miscellaneous configuration options.

About MSI

Mustang Software, Inc. offers a range of products for your telecommunication needs. All these products are available through your usual retail and mail order channels.

Wildcat! 4 BBS

Mustang Software unveiled the first *Wildcat!* BBS in 1986. Since its initial release, *Wildcat!* has emerged as the world's most popular Bulletin Board System (BBS) software with more than 30,000 Sysops worldwide. A centralized, PC-based information system, *Wildcat!* is packed with more intelligent features and value than any other BBS product available. Callers can send, receive and view messages and files, access external applications, and chat 24 hours a day. This full-featured software is available in four configurations for the hobbyist, small business and Fortune 1000 corporations, and allows simultaneous access from one to 250 users. Since Mustang offers complete BBS solutions, Sysops don't need to go searching for third-party add-on products.

Wildcat! Single Line

Our economical and easily-installed flagship product requires only a telephone line, a personal computer, and a modem to begin posting messages and routing files around the world. *Wildcat!* 4 maintains its dominance in the BBS market by giving you greater flexibility and power. Intelligent features include:

- A .GIF thumbnailer that lets your callers download and preview a sample of multiple .GIF files in one combined bitmapped file;
- An industry first, spell-checking editor to allow your callers to audit their text before posting their messages;
- RIPscrip graphics to provide your callers with a graphical user interface (GUI) and allow them to navigate the BBS with their mouse;
- A free-form menuing system that gives you the ability to create a custom menu structure and command system;

- Support for over 32,000 message conferences and file areas to give your BBS plenty of room to grow;
- Sysop-defined language files that allow your callers to select the BBS language interface of their choice;
- *wcDRAW* BBS display screen editor that lets you customize the look of your BBS interface;
- The ability to perform all BBS Sysop functions from remote so you can maintain your data while you're on the road.

These product features are just a few of the reasons why Mustang Software maintains its leadership as the Number 1 BBS supplier worldwide. Our liberal upgrade policy allows Sysops to start with our Single Line version and trade it in later for full credit to any of our MultiLine products.

Wildcat! MultiLine 10

This MultiLine package extends the functionality of our base product by supporting up to 10 simultaneous users through your Local Area Network (LAN), multitasking environment or combination. The MultiLine 10 allows concurrent use of database utilities without interrupting your online user activity, and adds a powerful online chat conferencing system.

Wildcat! MultiLine 250

Designed for corporate environments, *Wildcat!* MultiLine 250 extends MultiLine 10 features by supporting up to 250 concurrent users.. Your LAN users have all of the E-Mail, messaging and file functions of dial-up users, so you can increase corporate productivity, in-house communications and customer access.

Wildcat! MultiLine Platinum

Wildcat! was the industry's first BBS software to offer Intelligent DigiBoard support. MultiLine Platinum continues this heritage by offering serial and FOSSIL support to an already proven DigiBoard interface. With *Wildcat!* MultiLine Platinum, each 486 workstation can support up to eight high-

speed modem connections with the Intelligent PC/8e DigiBoard, and, when combined with your LAN, up to 250 total connections.

Wildcat! BBS Suite

Only Mustang could revolutionize the industry by producing the first "BBS Suite". The *Wildcat!* BBS Suite includes our top-of-the-line *Wildcat!* Multi-Line Platinum BBS software with the *wcPRO* database utility, *wcFAX* on-demand server, *wcGATE* Internet/Novell MHS mail gateway, and *wcCODE* development tool kit to give you the ultimate BBS solution.

Wildcat! BBS Suite processes statistics and creates graphs on *Wildcat!*'s activities; allows your customers to receive product literature and trouble-shooting tips via fax; attaches your message databases to the Internet and MHS-compatible E-Mail products; and gives you all the power to fully customize *Wildcat!*'s interface and create custom BBS applications, all in one economical yet powerful package. The BBS Suite is the ultimate tool for the professional Sysop —you!

An Exciting Array Of Add-On Packages.

Our powerful collection of add-on utilities will enhance any *Wildcat!* 4 BBS. Developed by the same Software Engineers that brought you *Wildcat!* 4, these utilities have the same easy-to-use interface as the rest of the *Wildcat!* 4 family, and are fully supported by Mustang Software, giving you a single-source for all your BBS needs.

wcPRO Utilities For The In-Control Sysop

wcPRO provides powerful user, message and file database maintenance capabilities. You can create custom reports with more than 20 pages of online statistics, create custom command macros for nightly batch processing, and export BBS data into other formats for external applications.

Our relational database handling makes managing your BBS callers, files and messages quick and easy. The *wcPRO* utilities package also includes our fax-on-demand processor, *wcFAX*, so your callers can request data on-

line and receive product literature, registration forms, and price list documents via their fax.

wcGATE Internet/MHS Messaging Gateway

A sophisticated messaging gateway, *wcGATE* enables your callers to send and receive Internet E-Mail and news right from your BBS without having to know a single Internet command. Built-in support for satellite connections means your callers can have a constant flow of Internet information at their fingertips. *wcGATE* also allows you to transfer BBS messages to your company's favorite MHS-compatible E-Mail system. Outside sales-people and remote offices can leave messages on the BBS and have them directed to the appropriate mail box on your LAN using Novell's Message Handling Service.

wcCODE Custom Online Development Engine

wcCODE allows you to develop custom applications to enhance or change Wildcat's operation. BASIC-like syntax combined with an Integrated Development Environment makes it easy to use the more than 200 built-in functions, including access to *Wildcat!*'s internal operations. *wcCODE* allows you to customize *Wildcat!* and write applications which will work on any *Wildcat!* 4 BBS. Easy-to-read manual and sample applications like our wcLIST BBS Lister and an on-line order system are included.

QmodemPro for DOS

For more than nine years the DOS version of *Qmodem* has been the first choice of well over a quarter of a million pioneering communication enthusiasts worldwide.

The latest release of Qmodem, *QmodemPro for DOS*, is available in a package designed for you – whether you're just discovering the on-line community, or you're a discriminating power user who demands a high performance, thoroughly professional package.

Off-Line Xpress

.QWK-compatible mail packet reader for wcMAIL, Tomcat, QMail, and more. Reading mail from BBSs has never been easier. OLX can read packets generated by any .QWK compatible mail door used by most BBS, and generates reply packets in the .QWK format which can be uploaded back to the originating BBS. Included FREE with *QmodemPro for DOS*, or available separately for only $40.

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